EPA's National Network for Environmental Management Studies Fellowship Program

Catalog for 2005

Student Fellowship Program

Visit the NNEMS web site at *www.epa.gov/enviroed/students.html*

United States
Environmental Protection
Agency

Office of Public Affairs
Office of Environmental
Education (1704A)

EPA 171-K-04-001

EPA's National Network for Environmental Management Studies Fellowship Program

Catalog for 2005

Program Announcement Identifier: EPA-OEE-05-01

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Introduction

Background

The United States Environmental Protection Agency (EPA) established the National Network for Environmental Management Studies (NNEMS) Fellowship Program in 1986 to foster a growing interest among higher education students in environmental careers. The NNEMS program is a comprehensive fellowship program that provides students an opportunity to participate in a fellowship project that is directly related to their field of study. The NNEMS program is sponsored by EPA's Office of Environmental Education.

EPA has awarded approximately 1,340 fellowships under the NNEMS program since its inception in 1986, and expects to award approximately 40 fellowships in 2005.

How to Use the NNEMS Catalog for 2005

The NNEMS Catalog for 2005 is divided into eight main sections:

- The *Introduction* provides background information about the NNEMS program and identifies points of contact.
- *Overview of the NNEMS Program* describes the program and the types of fellowships offered, identifies the role of program coordinators, and discusses compensation.
- *How to Apply* lists the eligibility requirements and describes the application materials and application process.
- The *Evaluation and Selection of NNEMS Fellows* discusses the evaluation of applications by staff of EPA and the notification process.
- *Procedures to Initiate and Complete a Fellowship* identifies step-by-step the actions a student must take to initiate and complete a fellowship.
- *Guidelines for NNEMS Fellows* explains the program guidelines that a student selected for a fellowship must follow.
- *Frequently Asked Questions* lists questions asked by applicants during previous years, as well as those from students awarded fellowships.
- The final section, *Catalog of 2005 Research Projects*, provides detailed descriptions of each of the fellowships offered in 2005, including information about the EPA office sponsoring the project, the location and duration of the project, as well as the desired educational level of the student.

Several appendices are included to assist students who are interested in applying for a NNEMS fellowship. *Appendix A, Application Materials*, provides complete application materials. *Appendix B, NNEMS Program Coordinators*, provides a list of the schools or educational institutions that have designated a NNEMS Program Coordinator. *Appendix C, IRS Publication 520: Scholarships and Fellowships*, provides information about filing taxes on a fellowship award.

How to Obtain Additional Copies

The NNEMS Catalog for 2005 can be viewed or downloaded in portable document format (pdf) from EPA's Office of Environmental Education web site at ***www.epa.gov/enviroed/students.html***. Portions of the 2005 catalog are also available in HTML format for interactive viewing of the fellowships.

Additional copies of this document can be obtained from:

U.S. Environmental Protection Agency
NNEMS Program
Office of Environmental Education (1704A)
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Telephone: 202-564-0452

For Additional Information

Please contact:

NNEMS Fellowship Program
Tetra Tech EM Inc.
1881 Campus Commons Drive, Suite 200
Reston, VA 20191
Telephone: 800-358-8769

Or visit EPA's NNEMS web site at:
www.epa.gov/enviroed/students.html

or:

Ms. Sheri Jojokian
NNEMS Program
Office of Environmental Education (MC 1704A)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460
Telephone: 202-564-0452

Overview of the NNEMS Program

Purpose

The purpose of the NNEMS program is to:

- Provide students with practical research opportunities and experiences in EPA's program and regional offices and in its laboratories
- Increase public awareness of and involvement in environmental issues
- Encourage qualified individuals to pursue environmental careers
- Help defray the costs associated with the pursuit of academic programs related to the field of environmental protection, such as pollution control, science, engineering, technology, social science, and specialty areas

Students who are awarded NNEMS fellowships are offered a unique opportunity to gain research and training experience directly linked to their undergraduate or graduate studies. NNEMS fellows conduct research projects to augment their academic studies, which EPA supports with financial assistance.

Fellowships

Under the NNEMS program, a range of fellowship activities are offered to help students increase their knowledge of environmental issues while refining their professional skills. Each year, the NNEMS program offers approximately 40 research projects, developed and sponsored by EPA Headquarters in Washington, D.C. and in EPA's 10 regional offices and laboratories throughout the U.S. The projects are specifically narrow in scope, allowing students to complete the research project while working full-time at EPA during the summer or part-time during the school year. Typically, the research is conducted at an EPA office or laboratory, although other arrangements can be made in certain circumstances.

The research projects are organized among five categories:

- **Environmental Policy, Regulation, and Law**

  Fellowships offered in this category provide students an opportunity to review and evaluate existing policies and regulations, as well as conduct research related to the development of new policies. The projects may include a component that focuses on environmental compliance.

- **Environmental Management and Administration**

  The topics of fellowships in this category focus on environmental management goals.

- **Environmental Science**

  Research projects in this category typically include direct participation in field studies and laboratory research. Environmental policy and regulation review requiring technical expertise is included in the Environmental Policy, Regulation, and Law category described above.

- **Public Relations and Communications**

  These types of fellowships include the review and analysis of public response to EPA policies and regulations, as well as general public opinion of environmental issues. The projects may include assisting with the development of communication tools, ranging from pamphlets and informational materials to slide and film presentations, to inform and educate the public about environmental protection issues.

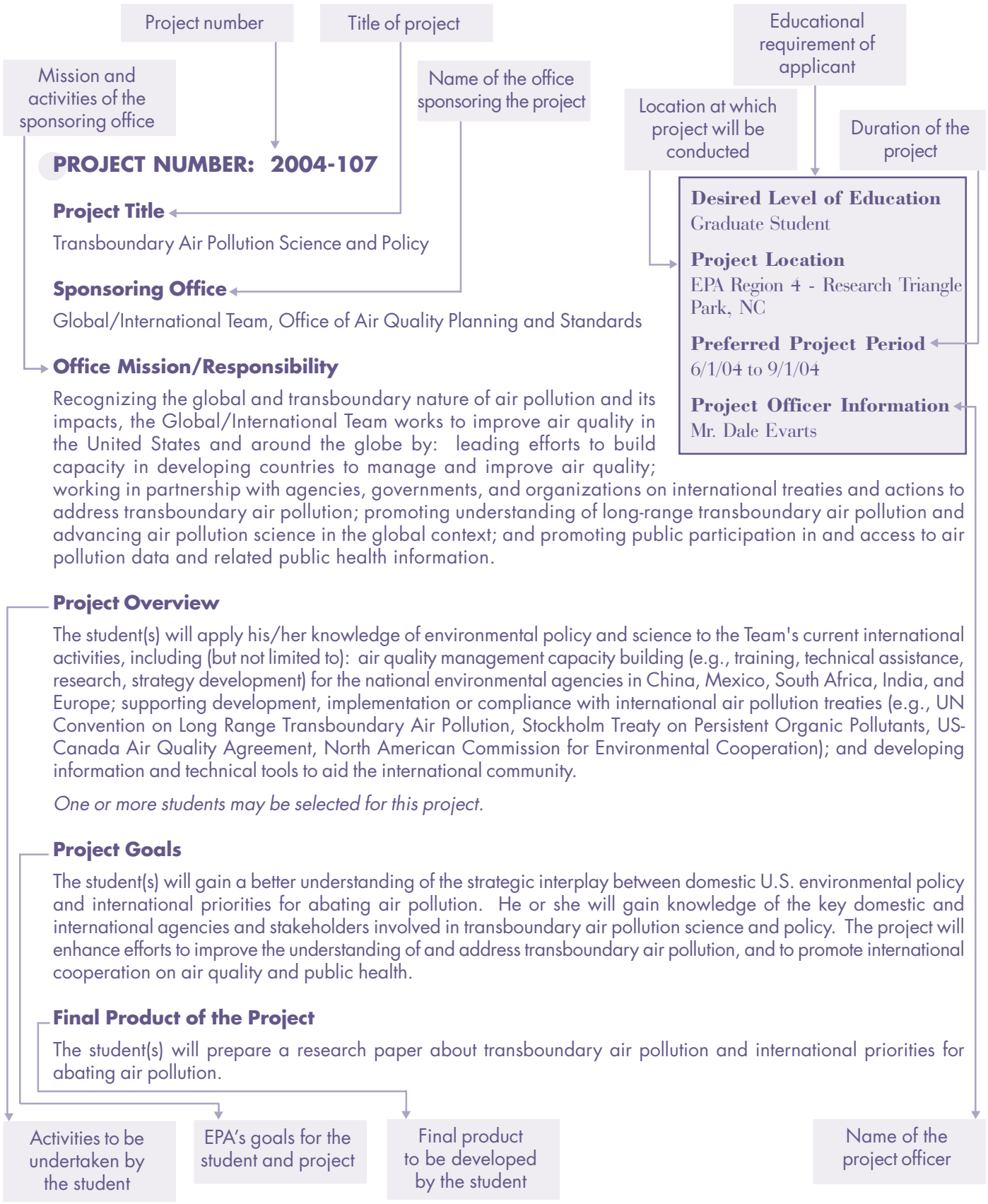
- **Computer Programming and Development**

  Research projects may include the development of computer software, the development and querying of databases, and the design of programming functions required in laboratory work.

Detailed descriptions of the research projects offered this year are provided in the section, *Catalog of 2005 Research Projects*, which begins on page 16 and on the NNEMS web site at ***www.epa.gov/enviroed/students.html***. Each research project is sponsored by an EPA project officer who serves as the main point of contact for the project.

Sample Project Description

Provided below is a sample project description for the NNEMS 2004 program. This example illustrates the content and format of the project descriptions that begin on page 16.



Compensation

All NNEMS fellowships are awarded directly to the individual students who are selected as fellows. The awards cannot be made to the educational institution at which the student is enrolled, although a student may request that EPA submit payment of tuition costs directly to the institution. See *Payment of the Grant* on page 12 for more information.

Students selected for a fellowship receive a grant award in the form of a stipend. The grant is paid in monthly installments based on the duration of the project. Grant awards range from approximately $6,900 to $11,000 per award for a 3-month, full-time period and reflect an individual student's level of education, as well as the location and duration of the research project. Even though students selected to receive NNEMS fellowships are grantees and not federal employees, the formula for the appropriate stipend amount is based on the current General Schedule (GS)-04 through GS-09 federal pay scale, and includes standard government locality rates. Freshmen students, for example, will be paid at the GS-04 rate; advanced graduate students at the GS-09 rate. The stipend will be increased to compensate for costs associated with travel or training for research projects that require these activities. Information about the GS pay scale by localities is available online at ***www.opm.gov/oca/04tables/indexGS.asp***.

There is no matching or cost sharing required of students awarded NNEMS fellowships.

Role of Program Coordinators

Many colleges, universities, and distance-learning organizations in the United States have identified NNEMS Program Coordinators. The Program Coordinators act as representatives of the NNEMS program by promoting the program on campus, displaying and making available to students all of the NNEMS materials, and assisting students in the preparation of their applications. For 2005, there are approximately 300 NNEMS Program Coordinators representing more than 200 educational institutions. A complete list of the NNEMS Program Coordinators is provided in *Appendix B, NNEMS Program Coordinators* and on the NNEMS web site at ***www.epa.gov/enviroed/NNEMS/2005pc.html***.

Please note: Any eligible student enrolled for academic credit at an accredited[1] 2- or 4-year college, university, or distance-learning institution may apply for a NNEMS fellowship, regardless of whether or not there is a NNEMS Program Coordinator at their university.

Disclaimer

EPA reserves the right to reject all applications for NNEMS fellowships and to make no awards.

[1] The 2- or 4-year college, university, or distance-learning institution must be accredited by a regional or national accrediting organization recognized by the U.S. Department of Education or the Council for Higher Education Accreditation.

How to Apply

The following section provides step-by-step instructions for how to apply for a NNEMS fellowship, identifies the eligibility requirements, lists the application materials, and provides an overview of the application process.

The Application Process

Applying for a NNEMS fellowship can be summarized in four steps:

Step 1: Carefully read the section below, *Eligibility Requirements,* to determine whether you meet all of the general requirements, as well as those identified for specific student levels. If you are eligible, continue on to Step 2.

Step 2: Review the 2005 project descriptions provided on page 16. Identify the project(s) in which you are most interested, as well as those in which you have attained the desired level of education as specified by EPA. If you would like additional information on or clarification of a specific project, please complete and submit the "Project-specific Questions" form that is available online at ***http://www.epa.gov/enviroed/NNEMS/2005projects.html***. A response to your question will be provided by email as soon as possible.

Step 3: For each project identified under Step 2, complete and submit a NNEMS Application following the specific directions provided in this section.

Step 4: Submit the completed application(s) by **January 15, 2005**.

A student selected for a NNEMS fellowship must complete additional documentation required by the federal government to apply for an official grant with EPA. The steps required to process a fellowship and the grant award are lengthy (See *Procedures to Initiate and Complete a Fellowhip* on pages 10 and 11 for more details).

Eligibility Requirements

A NNEMS fellowship is available to any associate, undergraduate, or advanced student who meets the general requirements listed below, as well as those identified for associate, undergraduate, and advanced students.

General Requirements

At a minimum, all applicants must be:

- A citizen of the United States, its territories or possessions, or lawfully admitted to the United States for permanent residency
- Enrolled for academic credit at a 2- or 4-year college or university, or distance-learning institution accredited by a regional or national accrediting organization recognized by the United States Department of Education or the Council for Higher Education Accreditation[2]
- Pursuing an educational program directly related to pollution control or environmental protection for the duration of the fellowship

Associate and Undergraduate Students

Students attending 2- or 4-year institutions or distance-learning institutions must meet the following requirements:

- 3.0 cumulative grade point average (GPA) based on a scale of 4.0 **at the time that the application is due** (a GPA of 2.999 for example, is not sufficient)
- Completion of at least four courses related to the field of environmental studies

Please note:
There are no exceptions to the requirement that applicants must have attained a 3.0 GPA at the time the application is due. Applicants whose GPA is below 3.0 based on the transcript enclosed with the application will not be eligible for consideration. For example, applicants with a GPA below 3.0 who submit applications in January with the expectation that their spring semester grades will increase their GPA to 3.0 are not eligible.

Advanced Students

Students enrolled in graduate or doctoral programs must meet the following requirements:

- Currently enrolled in a graduate or Ph.D. program or can provide proof of acceptance and enrollment to a graduate or Ph.D. program at the time of fellowship award[2]
- Completion of at least one semester of graduate or Ph.D. work or at least four undergraduate courses related to the field of environmental studies

[2] Applicants are not required to be enrolled at the time the application is due, typically in January, but must be enrolled at the time of fellowship award, which is typically in April. For example, an applicant who graduated with an undergraduate degree a few years ago and is not currently enrolled in an academic program, may submit an application for a NNEMS fellowship if the applicant has applied to, been accepted at, and is enrolled in a graduate school or a doctoral program that will begin in the Fall of 2005. Please note that EPA is prohibited from awarding fellowships to applicants who have been accepted, but have not enrolled, in an academic program.

The following students are not eligible for a NNEMS fellowship:

- Federal employees, including those who are on "leave without pay" status
- Undergraduate and graduate students who will graduate before the NNEMS fellowship is completed. (Students who complete their undergraduate studies before the end of a fellowship may apply if they are admitted and enrolled in a graduate program.)
- Students enrolled in certificate programs
- High school students

Application Materials

Students who are interested in applying for a NNEMS fellowship must submit four complete application packages (one original and three copies) that include:

- A completed NNEMS Application
- A résumé
- An official transcript for each 2- or 4-year college or university, or distance-learning institution attended. Official transcripts should be opened and copied as three copies of the transcript are required for each application. Applicants should include in the application package the envelope in which the original transcript was provided.
- A completed NNEMS Reference Form. The Reference Form should be prepared by a professor or advisor who knows the applicant well and can specifically discuss the student's aptitude and/or experience for the project. The Reference Form should be included with the application package; however, a reference submitted under separate copy will be accepted if it is postmarked on or before the application deadline.
- A completed NNEMS Disclosure and Waiver Statement
- Verification of acceptance and/or enrollment in a graduate or Ph.D. program if the applicant is a graduating senior

Blank application forms are included in *Appendix A, Application Materials*. The forms may also be obtained online at ***www.epa.gov/enviroed/students.html***. Students may also wish to contact the NNEMS Program Coordinator at their school (see *Appendix B, NNEMS Program Coordinators*) for additional information and assistance.

Submitting Confidential Information

If a student submits application materials that are considered by the student to be confidential, those materials should be clearly marked as confidential. In addition, the student must indicate on the Application Form that confidential materials are enclosed with the application. EPA will make final confidentiality decisions in accordance with Agency regulations listed in Part 2, Subpart B of Title 40 of the Code of Federal Regulations (CFR).

Submitting Multiple Applications

Students may apply to as many research projects as desired. Separate, complete application packages (one original and three copies) must be submitted for each project. Official transcripts may be photocopied if a student is submitting more than one application package. If more than one project application is submitted, the student must indicate the order of preference of each project on the Application Form.

Applications by Current NNEMS Fellows

A student who is currently holding a fellowship may apply for a new fellowship in 2005. The existing fellowship, however, must be completed and the fellowship ended (see *Procedures to Initiate and Complete a Fellowship* on pages 10 and 11) before a student will be considered eligible to receive and begin a new fellowship.

Submitting Applications for Consecutive Projects

Students may apply for consecutive projects, but the first fellowship must be completed before the second fellowship begins. For example, an applicant may apply for a project that ends in August as well as for a project that begins in September.

Deadline for Applying

The deadline for submitting applications for 2005 fellowships is January 15, 2005. All materials must be postmarked on or before January 15, 2005 to be eligible for consideration. Applications postmarked after January 15, 2005 will not be accepted.

Mailing Address for Applications

All NNEMS applications must be mailed to:

NNEMS Fellowship Program
Tetra Tech EM Inc.
1881 Campus Commons Drive, Suite 200
Reston, VA 20191

The deadline for submitting applications for 2005 fellowships is January 15, 2005. All materials must be postmarked on or before January 15, 2005 to be eligible for consideration.

Evaluation and Selection of NNEMS Fellows

Evaluation of Applications

NNEMS fellowships are awarded annually on the basis of EPA's request for applications and established evaluation criteria. Every application submitted for a specific research project will first be reviewed by external reviewers to determine whether the eligibility requirements have been met. Applications that meet the eligibility requirements will subsequently be reviewed by panels comprised of EPA staff members. The panels review and evaluate each application based on the evaluation criteria listed below.

- Relevancy of the classroom experience of the student as it relates to the EPA research project
- Student's understanding of the proposed EPA research project subject matter
- Relevancy of work experience of the student (whether volunteer activities, internships, or paid jobs) as it relates to the EPA research project
- Relevancy of the student's academic studies to the EPA research project
- Leadership skills, written communication skills, and demonstrated success at working well in an office, laboratory, or field environment, as appropriate to the project
- Potential for success, as reflected by academic records, letters of reference, and other relevant information

Applications that are scored highly by the panels of reviewers are then sent to the NNEMS staff and EPA project officers for consideration. At this point, members of the panels and or the EPA project officers may contact top-scoring applicants to determine the following:

- Additional related work experience
- The future goals of the student and interest in pursuing an environmental career in the public sector
- The demonstrated research abilities of the student
- The oral skills, level of enthusiasm, and demonstrated motivation of the student

Please note: In the event EPA receives inadequate applications as it relates to a specific research project, or if EPA receives ineligible or an insufficient number of applications for a specific research project, the project officer of the proposed project, working with the NNEMS staff, will then recruit applicants from an accredited college, university, or distance learning institution. Similarly, in the event a student who has been awarded a NNEMS fellowship grant must unexpectedly terminate the project early in the project period, EPA may non-competitively recruit a student from an accredited college, university, or distance learning institution once it has been determined that there are no remaining applicants available from the original application pool.

Negotiation

The EPA project officer may also contact an applicant to negotiate or discuss the details of a research project. Discussions between the project officer and applicant are intended to produce a clear, mutual understanding of the details of the project and the results the student wishes to achieve from the project. Such negotiations are initiated by the EPA project officer and are to be completed by March 2005. **The negotiations are not required and may not be conducted with each applicant.**

Selection and Notification of Award Status

Once EPA has made a decision about whom to award a fellowship, the EPA project officer will contact the student to offer the fellowship and to discuss specific details about the research project. Discussions among the project officer and applicant are intended to produce a clear, mutual understanding of the details of the project and the results the student wishes to achieve from the project. The student should expect to discuss with the EPA project officer general information about the project, including:

- Specific location where the project will be conducted
- Amount of the stipend
- Approximate duration of the project
- Primary point of contact for the student
- Names of the EPA staff with whom the student will be working

- Access to telephone, email, and the Internet
- General sources and information that will be made available to the students (for example, previous research studies, resources, etc.) and any non-monetary assistance that EPA may be able to provide to the student during the fellowship.

During the notification call, the EPA project officer will also review with the student the procedures he or she must follow to initiate and complete the fellowship as described in detail under *Procedures to Initiate and Complete a NNEMS Fellowship* on pages 10 and 11.

A background investigation for security purposes may be required of fellowship recipients, and personal information about the recipient will be required to complete these investigations. EPA reserves the right to terminate the fellowship agreement with a recipient if his or her background investigation reveals adverse information.

Student Acceptance of Award

A student selected for a NNEMS fellowship must complete additional documentation required by the federal government to apply for an official grant with EPA. The steps required to process a fellowship and the grant award are lengthy (See *Procedures to Initiate and Complete a Fellowhip* on pages 10 and 11 for more details).

Once a student has accepted a fellowship offer, the NNEMS staff will then send to the student a Fellowship Application Packet, instructions for completing the forms in the packet, and a copy of the Guidebook for NNEMS 2005 Fellows. **The forms must be completed and returned to the NNEMS staff within 2 weeks of receipt in order to begin the processing of the paperwork required of all fellowships.**

Notification of Non-Award

Students who are not selected for a 2005 fellowship will initially be notified by email in April, or within 60 days after the final selections are made. An official notification letter will be sent to the student's address provided on the NNEMS Application and will include a copy of the evaluation forms completed by members of the EPA review panel.

Students selected to receive a NNEMS fellowship must complete the forms in the Fellowship Application Packet within 2 weeks of receipt of the forms from EPA.

Procedures to Initiate and Complete a Fellowship

This section describes the procedures that students who are selected to receive NNEMS fellowships must follow to initiate and complete fellowships.

How to Initiate a Fellowship

The steps required to process a fellowship and the grant award are lengthy. It is imperative that students follow the instructions provided by EPA and submit all materials on time. A student may not begin a fellowship until all of the required documents are submitted.

DEADLINES

Step 1: Complete and Submit the Fellowship Application Packet Forms

Within 2 weeks of receipt

A student selected for a NNEMS fellowship will receive a grant award in the form of a stipend. Because a NNEMS fellowship is a grant issued by a federal agency, the student must complete additional documentation required by the federal government. In addition to completing a NNEMS application, a student selected for a NNEMS fellowship must submit the forms described below to receive a fellowship grant.

An applicant selected to receive a fellowship will be notified by the EPA project officer. NNEMS staff will then mail the student an official Fellowship Application Packet that includes a Fellowship Application (EPA Form 5770-2) and a Fellowship Facilities and Commitment Statement (5770-3).

The Fellowship Application Packet forms must be completed, signed, and returned to the NNEMS staff within 2 weeks of receipt.

Step 2: Processing of the Fellowship Application

Up to 6 weeks following receipt of the Fellowship Application Packet by EPA

Upon receipt of the completed Fellowship Application Packet forms, NNEMS staff will work with the EPA project officer to submit the necessary paperwork to EPA's Grant Administration Division (GAD) for approval and award of the grant. All the information that the student provided will be verified by GAD and entered into its computer files. The student's grant will be assigned a number and a grants specialist will process the student's forms and mail the acceptance documents to the student's permanent mailing address for the student's signature. A Congressional notification period of 5 days must be observed before the acceptance documents are mailed to the student. The processing of the grant may take up to 6 weeks to complete.

Step 3: Complete and Submit the Acceptance Documents

Approximately 6 weeks after the Fellowship Application Packet forms have been submitted to EPA, the student will receive a Fellowship Agreement (EPA Form 5770-8), Fellowship Activation Notice (EPA Form 5770-7), and Completion of Studies Notice (EPA Form 5770-9). **The student may not start work with EPA without having signed and returned the Fellowship Agreement and without having the EPA project officer sign the Fellowship Activation Notice.**

- **Fellowship Agreement.** The Fellowship Agreement is the written agreement (including any amendments) between EPA and the student awarded a fellowship. The amount of the fellowship award and the terms and conditions of the fellowship are provided in the Fellowship Agreement. The student must sign the form and return it to GAD at the address provided on the form within 3 weeks of receipt or within a time frame approved by GAD. If the student does not return the Fellowship Agreement or request an extension of the acceptance time limit within 3 weeks, the award official may void the agreement. EPA will not be responsible for any costs incurred under a voided agreement.

  Within 3 weeks of receipt

- **Fellowship Activation Notice.** The Fellowship Activation Notice should be signed by the EPA project officer on the student's first day of work. The EPA project officer should then return the signed form to GAD. Once the signed Fellowship Activation Notice is received, GAD is responsible for sending the notice to EPA's Financial Management

  First day of fellowship

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Continued...

	DEADLINES
Center in Las Vegas, Nevada, to authorize payments to the student. If the Fellowship Activation Notice is not submitted to GAD within 90 days of the start of the fellowship, EPA may initiate action to terminate the fellowship agreement.	
• **Completion of Studies Notice.** The Completion of Studies Notice should be kept by the student until the end of his or her work with EPA.	**Last day of fellowship**

Step 4: Begin the Fellowship

The student should begin the fellowship on the date and at the location arranged with the EPA project officer and specified in the Fellowship Agreement.

Varies, as agreed by EPA project officer and student

How to Complete a Fellowship

At the completion of a NNEMS fellowship, all NNEMS fellows are required to:

	DEADLINES
Step 1: Submit a Final Report of the Project Copies of the final report must be provided to the EPA project officer as well as to the NNEMS staff identified on page 1. The report should be submitted on the last day of the fellowship. Unless directed otherwise by the EPA project officer, the report should summarize the specific project undertaken by the student and the project results.	**Last day of fellowship**
Step 2: Submit the EPA Fellowship Completion of Studies Notice (EPA Form 5770-9) The Completion of Studies Notice (EPA Form 5770-9) must be completed, signed by the EPA project officer, and submitted to EPA's Financial Management Center in Las Vegas, Nevada, on the last day of the fellowship. The final payment for the balance of the fellowship award, if any, is typically mailed to the student within 2 weeks after the fellowship is officially ended.	**Last day of fellowship**
Step 3: Retain All Records The student should retain all records related to the fellowship for 3 years following the completion date identified on the Completion of Studies Notice. Please note that EPA, the Inspector General, the Comptroller General of the United States, and any of their duly authorized representatives have the right of timely and unrestricted access to a student's documents, papers, or other records related to a fellowship in order to make audits, examinations, excerpts, transcripts, and copies of such documents. The rights of access in this paragraph are not limited to the required retention period but shall last as long as records are retained.	**3 years after completion of fellowship**

Guidelines for NNEMS Fellows

Provided below are the general rules and regulations that guide NNEMS fellows.

Payment of the Grant

Students selected for a fellowship receive a grant award in the form of a stipend. The grant is paid in monthly installments based on the duration of the project. EPA will not make payments under a fellowship agreement until the award official receives the signed Fellowship Activation Notice. Unless the fellowship provides another payment process, the student may request EPA to make the stipend payment as follows:

- A portion paid directly to the educational institution for tuition costs
- Payment to the student on a monthly basis or another basis approved by the EPA project officer and as stated in the Fellowship Agreement. The payment may be made directly to the student or by direct deposit. Students interested in direct deposit should contact Ms. Sheri Jojokian to request a Direct Deposit Enrollment Form (contact information is provided on page 1). Once the form is completed and returned to EPA's Financial Management Center, the stipend payment will be made by direct deposit.

The first stipend payment is typically received approximately 4 to 6 weeks after the fellowship begins.

Tuition costs sent directly to the educational institution attended by the student are tax exempt. Students who prefer that their tuition costs be sent directly to their educational institution must make this request of their EPA project officer before the funding package is complete.

Taxes

EPA does not withhold any taxes nor generate an Internal Revenue Service (IRS) Form W-2, Wage and Tax Statement; nonetheless, the stipend amount is taxable. Students must maintain a record of their stipend amount and file their own taxes. According to the latest rules of the IRS, portions of the stipend may be tax exempt. Tax-exempt funds for NNEMS fellowships include the portion of money sent directly to a student's school for tuition. These funds do not have to be reported to the IRS. The IRS recommends that students pay quarterly taxes on large stipend amounts in order to minimize the possibility of being assessed a penalty at the end of the year. Please see *Appendix C: IRS Publication 520: Scholarships and Fellowships*, for detailed information and instructions for filing taxes on a fellowship award. Please contact your local IRS office if you have further questions.

Important Tax Information:

- **EPA does not withhold any taxes nor generate an IRS Form W-2**
- **The stipend amount is taxable, although the portion of the stipend used for tuition costs is tax exempt (see above, *Payment of the Grant*)**
- **Students are required to keep their own income records and file their own taxes**
- **Students will not receive an IRS Form W-2 from EPA**

Benefits

A student selected for a NNEMS fellowship is an EPA grant recipient, not an EPA employee. As such, the student will not accrue leave, will not be entitled to health or life insurance benefits, nor have taxes withheld from his or her stipend.

Travel and Housing

EPA is not responsible for a student's travel expenses to and from the project site or for the student's housing costs. If selected for a NNEMS fellowship that is located away from home or school, students are responsible for making their own arrangements for travel and housing.

If a student is required to participate in official travel during the performance of a project, EPA will add to the stipend additional funds to cover associated travel costs. Because students will not be reimbursed for any unapproved travel costs, it is very important that students do not incur any travel expenses until the stipend has been increased to cover such costs.

NNEMS fellows may not drive a government-owned (EPA or General Services Administration [GSA]) vehicle; however, they may ride as passengers in government-owned vehicles.

If a student must travel for research purposes, he or she does so at his or her own risk; EPA is not responsible for any accidents that may occur. Please see the following section about liabilities for more information.

Liabilities

The issue of liability for injuries that result from the acts of NNEMS fellows arises with respect to two categories of injured persons: the NNEMS fellow and all others.

- In the case of a NNEMS fellow who is injured while performing his or her fellowship, it is important to recognize that the fellow is not an EPA employee. Rather, as the recipient of a stipend that is comprised of grant monies, the student is a grantee. As such, the student is not entitled to compensation for on-the-job injuries under the Federal Employees Compensation Act (FECA), Section 5 of the United States Code (U.S.C). §§ 9101 et seq. The government is not responsible for any accidents that may occur on site or during the course of required travel for a fellowship.
- In the event that a student's injury is the result of negligence on the part of an EPA employee, the student may be eligible for compensation under the Federal Tort Claims Act (FTCA), 28 U.S.C. §§ 1346, 2671-2680.[3]
- In instances in which a student injures others, in the execution of his or her research duties, the government generally is not liable under the FTCA for any injury that results from the student's negligent acts because the student is not an EPA employee.

In summary, a student may be vulnerable to significant personal liability for any damages or injuries that may result from their acts. Consequently, EPA recommends that students be fully informed of their exposure to personal liability and suggests that students may wish to secure personal injury insurance. EPA project officers or managers should not place the students in hazardous situations or in situations in which a considerable potential for accident or injury exists.

Student Program Evaluation

In an effort to continuously improve the NNEMS program each year, EPA may contact NNEMS fellows by telephone or email to determine their overall satisfaction with the NNEMS program and to request suggestions for improving the program in future years. Participation in the evaluation will take no more than a few minutes and is voluntary.

Confidential Business Information

NNEMS fellows are not permitted access to or use of Confidential Business Information (typically referred to as "CBI") or enforcement-sensitive information.

Resolution of Disputes

If EPA determines that an application is ineligible or not selected for award based on the criteria listed in this announcement, EPA will provide the applicant with a written or email notification within fifteen calendar days of the decision. The notification will briefly explain the reasons why the application was determined to be ineligible or not selected for award; will include procedures for requesting a debriefing of the basis for the decision; and will include information describing the dispute process and the applicant's dispute rights.

[3] The FTCA provides a cause of action against the United States to individuals who incur damage to property or suffer personal injury as a result of a negligent or wrongful act or omission of a government employee acting within the scope of his or her employment.

Frequently Asked Questions

Listed below are questions asked by applicants to the NNEMS program in previous years, as well as by students who received fellowship awards.

Q How would I obtain information, specifically application materials, for a fellowship in environmental science?

A Detailed information about EPA's NNEMS Program, including application forms, is available online at ***www.epa.gov/enviroed/students.html*** and in this catalog. Undergraduate or graduate students pursuing environmental programs are encouraged to apply. Updated program and application materials are posted on the web site each year, typically in October.

Q I am interested in applying for a NNEMS fellowship, but I do not have a NNEMS Program Coordinator at my school. May I apply?

A Yes, any eligible student may apply for a NNEMS fellowship, regardless of whether or not there is a NNEMS Program Coordinator at his or her university.

Q I am graduating in May 2005 and will be taking a year off before attending graduate school in the Fall of 2006. Am I eligible to apply for a fellowship scheduled to take place during the Summer of 2005?

A No, only students who are currently enrolled in undergraduate or graduate school at the time of fellowship award are eligible.

Q I am interested in the NNEMS Fellowship Program, but no projects are being offered this year in the state in which I live. May I apply for projects outside my home state?

A Yes, you may apply for research projects located outside your home state, but EPA will not provide funding to cover transportation and housing costs.

Q Is the NNEMS program open to international students who attend U.S. universities or colleges?

A No. The NNEMS program is only available for students who are citizens of the U.S., its territories or possessions, or who are lawfully admitted to the U.S. for permanent residence.

Q I am an American citizen currently enrolled as a full-time graduate student at Cambridge University. Are American students pursuing graduate-level studies in the area of environmental management/environmental protection at Cambridge University eligible to apply for the NNEMS Fellowship Program?

A Yes. You are eligible to apply for a NNEMS fellowship because you are a U.S. citizen, Cambridge University is recognized by the U.S. Department of Education as a fully accredited academic institution, and you are enrolled in an academic program directly related to pollution control or environmental protection.

Q Are high school students eligible for the NNEMS Fellowship Program?

A No, only undergraduate and graduate students are eligible for NNEMS fellowships.

Q Do the project descriptions offered in the NNEMS Catalog remain the same each year, or are new projects offered each year?

A The number and types of projects change each year depending on EPA's departmental and program issues and priorities, as well as funding available for the fellowships.

Q Do applications have to be received or postmarked by the date of the deadline?

A The application packets must be postmarked on or before the date of the deadline. The deadline for the 2005 program is January 15, 2005.

Q May my academic advisor mail the NNEMS Reference Form required for the NNEMS application under separate cover, or must the reference be included in the original application packet?

A We prefer that the Reference Form be included in the application package, but your advisor may send the letter directly to the NNEMS Fellowship Program. However, please be sure to note on your application packet that the letter will be coming under separate cover. In addition, the letter must be postmarked by the deadline and be clearly marked to correspond with your application.

Q If I request an original, sealed transcript, may I break the seal to make copies of the transcript as required?

A Yes. If you receive one original transcript from your university's records office, you may open the sealed envelope to make photocopies. Please include the envelope that contained the original transcript in the application package and note that it was opened to make the photocopies.

Q I am interested in applying for a NNEMS fellowship and would like to apply for multiple projects. Do I need to submit original transcripts for each of the projects?

A You must submit an original transcript and three copies of your transcripts for at least one of the projects for which you are applying. You are permitted to include copies of your transcript for other projects for which you are applying. See the section, *How to Apply*, on page 5 for detailed instructions on applying for a fellowship.

Q I have been selected for one of the projects for which I submitted an application, but have decided to decline the offer. Would I be penalized for the other project or projects for which I applied?

A No, you would not be penalized for declining a fellowship offer. The criteria for evaluating and selecting NNEMS fellows are based on determining who is the most qualified candidate who will meet the needs of the specific project.

Q When do we find out whether we were selected for the NNEMS Program?

A Most candidates are notified of their acceptance in late March or April. Students who are not awarded fellowships are typically notified in late April or early May.

Q I just started work on my project. When can I expect my first stipend check?

A You should get your first check within 4 to 6 weeks after returning the signed Fellowship Agreement and the signed Fellowship Activation Notice to the Grants Administration Division (see *Procedures to Initiate and Complete a Fellowship* on page 10). The Fellowship Agreement should be signed and returned immediately upon receipt, and the Fellowship Activation Notice should be signed by your EPA project officer and submitted to the Grants Administration Division on your first day of work.

Q I have been receiving my stipend checks monthly, but I've noticed that no taxes are being deducted. Are fellowships taxable?

A Yes. While EPA does not withhold any taxes, nor generate an IRS Form W-2, Wage and Tax Statement, the stipend amount is taxable. Students must maintain a record of their stipend amount and file their own taxes. According to the latest IRS rules, portions of the stipend may be tax exempt. Tax-exempt funds include, for example, the portion of money sent directly to a student's school for tuition and supplies. These funds do not have to be reported to the IRS. The IRS recommends that students pay quarterly taxes on large stipend amounts to minimize the potential for a penalty at the end of the year. *Appendix C* provides information about filing taxes on the fellowship award. Please contact the IRS for any further information related to the filing of taxes on a fellowship grant.

Q A nearby university has expressed interest in my project and would like to add more funding for it. Is this allowable?

A Yes. It is acceptable to receive a full or partial match of funding from other sources. However, if a university added money to the grant, it would be an agreement between the student and the university. EPA would not have anything to do with that portion of the agreement, and the NNEMS fellow must account for the EPA funds separately.

Q My project report has been finalized, and I've given a copy to my project officer and the NNEMS staff. May I copyright the report or have it published in a periodical?

A Yes. Because NNEMS students are grantees, you have copyright authority without having to seek the approval of the federal government as discussed in 40 CFR, Subchapter B - Grants and Other Federal Assistance, Part 30, Subpart C - Post Award Requirements, 30.36. Please consult the CFR for limitations and exceptions to this authority.

Q What if a project description is described minimally? How can I develop my Proposed Research Plan in response?

A If you would like additional information on or clarification of a specific project, please complete and submit the "Project-specific Questions" form that is available on line at *www.epa.gov/enviroed/NNEMS/2005projects.html*. A response to your question will be provided by email as soon as possible.

Catalog of 2005 Research Projects

Described on the following pages are the NNEMS fellowships being offered in 2005. As discussed in detail in the *Overview of the NNEMS Program* section, the fellowships are organized under five categories:

- **Environmental Policy, Regulation, and Law**

  Fellowships offered in this category provide students an opportunity to review and evaluate existing policies and regulations, as well as conduct research related to the development of new policies. The projects may include a component that focuses on environmental compliance.

- **Environmental Management and Administration**

  The topics of fellowships in this category focus on environmental management goals.

- **Environmental Science**

  Research projects in this category typically include direct participation in field studies and laboratory research. Environmental policy and regulation review requiring technical expertise is included in the Environmental Policy, Regulation, and Law category described above.

- **Public Relations and Communications**

  These types of fellowships include the review and analysis of public response to EPA policies and regulations, as well as general public opinion of environmental issues. The projects may include assisting with the development of communication tools, ranging from pamphlets and informational materials to slide and film presentations, to inform and educate the public about environmental protection issues.

- **Computer Programming and Development**

  Research projects may include the development of computer software, the development and querying of databases, and the design of programming functions required in laboratory work.

The fellowships are organized by category and listed in numerical order by project number. Each entry presents a description of the fellowship and identifies the EPA office that is sponsoring the fellowship, the location at which the fellowship will be conducted, the timeframe for the project, the desired educational level of the student, and the name of the EPA project officer.

Provided on the following pages is a matrix that identifies for each project offered in 2005 the project number, category, desired educational level of the student, location, and duration of the project.

2005 Research Projects Matrix

Project Number	Desired Level of Education: Freshman	Sophomore	Junior	Senior	Graduate Student	Ph.D. Student	Project Location	Preferred Project Period
Environmental Policy, Regulation, and Law								
2005-101					•	•	EPA Region 4 – Research Triangle Park, NC	
2005-102	•	•	•	•	•	•	EPA Region 10 – Seattle, WA	
2005-103			•	•	•		EPA Headquarters – Arlington, VA	
2005-104			•	•	•		EPA Region 3 – Philadelphia, PA	
2005-105					•		EPA Headquarters – Washington, DC	5/31/06
2005-106					•	•	EPA Headquarters – Washington, DC	5/31/06
2005-107			•	•	•		EPA Region 3 – Philadelphia, PA	
2005-108					•	•	EPA Region 4 – Research Triangle Park, NC	
2005-109					•	•	EPA Headquarters – Washington, DC	
2005-110					•		EPA Headquarters – Washington, DC	6/15/06
2005-111					•		EPA Region 2 – New York, NY	12/1/05
Environmental Management and Administration								
2005-201			•	•	•		EPA Headquarters – Washington, DC	
2005-202			•	•	•		EPA Region 3 – Philadelphia, PA	
2005-203					•	•	EPA Region 4 – Athens, GA	6/2/07
2005-204					•		EPA Region 3 – Philadelphia, PA	
Environmental Science								
2005-301			•	•	•		EPA Region 1 – Narragansett, RI	5/31/06
2005-302			•	•	•		EPA Headquarters – Arlington, VA	
2005-303			•	•	•		EPA Headquarters – Arlington, VA	
2005-304			•	•	•		EPA Region 7 – Kansas City, KS	

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Continued...

Project Number	Desired Level of Education: Freshman	Sophomore	Junior	Senior	Graduate Student	Ph.D. Student	Project Location	Preferred Project Period
Environmental Science (continued)								
2005-305			•	•	•		EPA Region 1 – Narragansett, RI	
2005-306			•	•	•	•	EPA Region 4 – Athens, GA	6/2/06
2005-307					•	•	EPA Headquarters – Washington, DC	
2005-308					•		EPA Region 4 – Athens, GA	6/30/06
2005-309					•		EPA Headquarters – Washington, DC	
2005-310					•		EPA Region 4 – Athens, GA	5/31/06
2005-311					•		EPA Region 2 – New York, NY	12/1/05
2005-312			•	•	•	•	EPA Region 4 – Athens, GA	5/30/06
2005-313	•	•	•	•	•	•	EPA Region 4 – Athens, GA	6/2/08
2005-314					•	•	EPA Headquarters – Washington, DC	
2005-315					•		EPA Region 9 – Las Vegas, NV	
Public Relations and Communications								
2005-401			•	•	•		EPA Region 2 – New York, NY	
2005-402					•		EPA Region 9 – Las Vegas, NV	
2005-403			•	•	•		EPA Headquarters – Arlington, VA	
2005-404					•		Student's Academic Institution	6/1/08
2005-405					•	•	EPA Headquarters – Washington, DC	12/31/05

2005 Research Projects

Environmental Policy, Regulation, and Law

PROJECT NUMBER: 2005-101

Desired Level of Education
Graduate Student to Ph.D. Student

Project Location
EPA Region 4 – Research Triangle Park, NC

Preferred Project Period
6/1/2005 to 8/31/2005

Project Officer
Ronald Evans

Project Title

Applied Environmental Economics Analysis

Sponsoring Office

Air Quality Strategies & Standards Division/Innovative Strategies and Economics Group

Office Mission/Responsibility

The Innovative Strategies & Economics Group provides regulatory analytical support for national stationary source emission regulations and the National Ambient Air Quality Standards programs. The scope of regulatory analytical support includes control strategy design and costing, economic impact, and benefit analysis as well as innovative strategies, such as trading and fee programs.

Project Overview

The student(s) will apply his or her knowledge of economic theory and principles within the structure of Congressional Mandates, Executive Orders, and Judicial Rulings. Within this structure, the student(s) will verify and validate analytical procedures and findings, perform sensitivity analyses, and develop graphical and Geographic Information Systems-based presentations of data and results. The potential scope of the project includes benefits analysis, control strategy design and costing, economic impact assessment, and cost-benefit analysis. Completion of the project includes a presentation of the results to senior professionals and managers as well as the delivery of associated technical reports.

One or more students may be selected for this project.

Project Goals

The student(s) will better understand the effect of the legislative, executive, and judicial branches' considerations on the structure and conduct of applied environmental economics. In addition, the student(s) will gain insight regarding the evaluation and application of analytical methods and data as well as multi-disciplinary approaches to regulatory analyses.

Final Product of the Project

Depending on the project, the student(s) may develop a report or presentation providing the results of his or her work during the course of the fellowship.

PROJECT NUMBER: 2005-102

Desired Level of Education
Freshman to Ph.D. Student

Project Location
EPA Region 10 – Seattle, WA

Preferred Project Period
6/15/2005 to 9/15/2005

Project Officer
Kelly Huynh

Project Title

Risk Management Program Support

Sponsoring Office

Environmental Cleanup Office/Emergency Response Unit

Office Mission/Responsibility

The main mission of the Emergency Response Unit is to prevent, prepare, and respond to emergency incidents that could potentially impact human

health and the environment. The Risk Management Program (RMP) is a prevention program designed to protect the public from off-site releases of hazardous substances. RMP regulates facilities that store or use toxic and flammable substances at or above certain threshold quantities and requires the development of a Risk Management Plan. The objective of this program is to ensure that a regulated facility has the proper tools and communication methods to prevent and respond to a chemical accident before a catastrophic release occurs.

Project Overview

The fellow will have an opportunity to participate in Clean Air Act (CAA) 112 (r) RMP enforcement and compliance assistance meetings, inspections, investigations and case development. The fellow will research outreach and compliance assistance information for industry and meet with members of the State Emergency Response Commissions (SERCs) and Local Emergency Planning Community (LEPCs). The fellow will have an opportunity to understand the regulatory requirements of the CAA 112(r) RMP as well as the Emergency Planning and Community Right To Know Act (EPCRA) and EPA's Emergency Response Program.

Project Goals

The fellow will gain knowledge in the compliance and enforcement process and have an opportunity to enhance technical writing skills. The fellow will also participate in management briefings and other meetings to enhance public speaking skills.

Final Product of the Project

The fellow will develop a written report that incorporates compliance assistance and enforcement components.

PROJECT NUMBER: 2005-103

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Headquarters – Arlington, VA

Preferred Project Period
6/1/2005 to 8/31/2005

Project Officer
Linda Fiedler

Project Title

Analyze Trends of Analytical Services at Superfund Sites

Sponsoring Office

Office of Superfund Remediation and Technology Innovation/Technology Innovation Program

Office Mission/Responsibility

EPA's Technology Innovation Program advocates the development and application of new treatment and characterization technologies by government and industry to contaminated waste sites.

Project Overview

The Analytical Services Branch (ASB) in the Office of Superfund Remediation and Technology Innovation provides analytical chemistry services to Superfund site managers in support of site and risk characterization activities. The fellow will review national and regional trends in the types of analytical services requested, and their costs, to gain a better understanding of evolving analytical needs and issues.

When completing the application, students should explain in 1 or 2 sentences why the project is of interest, how their academic courses could apply, and how the project meets their personal academic goals.

Applicants may contact the project officer to discuss proposals on other projects related to innovative technologies used to clean up hazardous waste sites.

Project Goals

Each fellow will produce a research paper. If time allows, the fellow also may work on a smaller project, such as (1) developing a status report on the use of a specific technology in the field, or (2) conducting an analysis of the results of EPA-funded academic research on cleanup-related technologies.

Final Product of the Project

Each fellow will produce a research paper related to his or her review of national and regional trends in the types of analytical services requested at Superfund sites.

PROJECT NUMBER: 2005-104

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Region 3 – Philadelphia, PA

Preferred Project Period
6/1/2005 to 8/15/2005

Project Officer
Richard Pepino

Project Title

Implementing Water Quality Strategies During High Flow Conditions

Sponsoring Office

Water Protection Division/EPA Region 3

Office Mission/Responsibility

Strategic plan development and implementation for the Water Protection Division, water policy analysis, and regulatory program evaluation.

Project Overview

The student will investigate approaches at state, local, and basin levels to develop water quality strategies for high flow conditions in watersheds. The student will identify practices that are currently being employed to assess pathogen levels in surface water along with associated health risks. The student will utilize his or her academic training and research tools to conduct an investigation to determine which monitoring and policy approaches might prove most applicable in the mid-Atlantic region.

Project Goals

The student will prepare a final report that catalogues local and regional practices in the area along with a determination of what the long-term prognosis will be in terms of supporting defensible water quality standards. This project will be beneficial to many communities that are struggling with this issue at the local government level by providing important information upon which to develop high flow conditions planning approaches. The student will sharpen his or her critical thinking by incorporating information into the regulatory process. The student will work independently, but will be afforded the opportunity to work with technical and regulatory experts as well.

Final Product of the Project

The project will culminate in a final report that catalogues local and regional practices to develop water quality strategies for high flow conditions.

PROJECT NUMBER: 2005-105

Desired Level of Education
Graduate Student

Project Location
EPA Headquarters – Washington, DC

Preferred Project Period
6/1/2005 to 5/31/2006

Project Officer
Tim Landers

Project Title

Assessment of Nationwide Permits Issued Under Section 404 of the Clean Water Act

Sponsoring Office

Office of Water/Office of Wetlands, Oceans, and Watersheds/Wetlands Division/Wetlands and Aquatic Resources Regulatory Branch

Office Mission/Responsibility

Effective implementation of Clean Water Act Section 404 and related programs with federal, state and tribal partners to ensure no net loss of wetlands and other aquatic ecosystems.

Project Overview

Section 404 of the Clean Water Act (CWA) establishes a permit program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Under CWA 404 (e), the U.S. Army Corps of Engineers (Corps) is authorized to issue general permits on a nationwide, regional, or state basis for particular categories of activities that are similar in nature and will cause only minimal adverse environmental effects. The student will research current needs regarding existing nationwide permits (NWP). While conducting the research, the student will have the opportunity to interact with federal, state, and local regulatory agencies.

Project Goals

The student will be exposed to a wide range of environmental issues associated with the Section 404 permit program. This will entail gaining both a national and regional perspective on the scope of issues regarding existing NWPs, General Conditions, definitions, etc. These issues may include, but are not limited to, clarifying the applicability of specific NWPs, modifications to existing NWPs, and addition of new NWPs. The student will gain an understanding from federal, state and local regulatory partners of the extent and type of data that is available and relevant to authorizations under CWA Section 404. Such data might include the total number of permit actions authorized, type of permit issued, impacts, types of resources affected, mitigation, etc.

Final Product of the Project

The student will develop a report identifying lessons learned concerning current permitting needs, particularly with regard to NWPs.

PROJECT NUMBER: 2005-106

Desired Level of Education
Graduate Student to Ph.D. Student

Project Location
EPA Headquarters – Washington, DC

Preferred Project Period
6/1/2005 to 5/31/2006

Project Officer
Donna An

Project Title

Improving Tools for Wetlands Protection

Sponsoring Office

Office of Water/Office of Wetlands, Oceans, and Watersheds

Office Mission/Responsibility

Support efforts to improve and enhance wetlands protection, management and/or restoration.

Project Overview

Potential topics for the project include, but are not limited to: 1) researching how wetlands can be better integrated into watershed management approaches; 2) researching market-based tools for states and tribes to use to better protect wetlands (promoting the use of trading, banking, and other market-based tools and improving tools to quantify wetland functions and monetize benefits); 3) researching how wetland restoration techniques can be improved to better replicate wetland functions and values; 4) researching and developing techniques that states and tribes can use to evaluate the health of wetlands; and 5) researching state, tribal, and local government needs to improve their ability to protect, manage, and restore their wetland resources.

Project Goals

The project will help improve and enhance tools, science, and/or policies for wetlands protection, management and restoration. The project will enable the student to learn about wetlands protection, wetlands restoration, and watershed management approaches.

Final Product of the Project

The actual project and final product will be negotiated with the selected fellow.

PROJECT NUMBER: 2005-107

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Region 3 – Philadelphia, PA

Preferred Project Period
6/1/2005 to 8/15/2005

Project Officer
Ralph Spagnolo

Project Title

Watershed Restoration Approaches

Sponsoring Office

Office of Watersheds, Water Protection Division

Office Mission/Responsibility

To develop strategies for implementation of watershed restoration projects.

Project Overview

This project will require the student to research priority watersheds and track the progress of ongoing restoration activities in priority watersheds. This project will provide the student the opportunity to work with EPA, state, and local professionals.

Applicants for this project should have knowledge and interests with holistic watersheds approaches to alleviate local and regional water and ecosystem problems.

Project Goals

The student will enhance his or her knowledge of restoration activities at priority watersheds.

Final Product of the Project

The student will prepare a report that addresses impairments in targeted watersheds.

PROJECT NUMBER: 2005-108

Desired Level of Education
Graduate Student to Ph.D. Student

Project Location
EPA Region 4 – Research Triangle Park, NC

Preferred Project Period
6/6/2005 to 8/26/2005

Project Officer
Sara Terry

Project Title

International Air Quality Management

Sponsoring Office

Office of Air Quality Planning and Standards – Global/International Team

Office Mission/Responsibility

Recognizing the global and transboundary nature of air pollution and its impacts, the Global/International Team works to improve air quality in the United States and around the globe by leading efforts to build capacity in developing countries to manage and improve air quality; working in partnership with agencies, governments, and organizations on international treaties and actions to address transboundary air pollution; promoting an understanding of long-range transboundary air pollution and advancing air pollution science in the global context; and promoting public participation in and access to air pollution data and related public health information.

Project Overview

The student will apply his or her knowledge of environmental policy and science to the Global/International Team's current international projects and programs. The student will research environmental aspects of trade agreements, specifically, air quality issues. The student may also research air quality management capacity building (e.g., training, technical assistance, or outreach documents) with national environmental agencies in China, South Africa, India, Mexico, and Southeast Asia; international treaties and actions to address transboundary air pollution; and public access to air pollution data and related public health information.

The student may also propose to pursue additional research in a related topic area.

Project Goals

The student will gain a better understanding of the strategic interplay between domestic U.S. environmental policy and international priorities for abating air pollution and will be offered the opportunity to pursue research in a relevant topical area. The student will gain an understanding of the United States EPA's programs and organizations involved in international air quality management.

Final Product of the Project

The student will prepare a summary report on his or her research.

PROJECT NUMBER: 2005-109

Desired Level of Education
Graduate Student to Ph.D. Student

Project Location
EPA Headquarters – Washington, DC

Preferred Project Period
6/1/2005 to 8/31/2005

Project Officer
Tom Born

Project Title

Economic or Financial Analysis of Regulatory Impacts on Public Entities

Sponsoring Office

Office of Water/Office of Science and Technology/Engineering and Analysis Division/Economic and Environmental Assessment Branch

Office Mission/Responsibility

Development of national industrial water discharge regulations.

Project Overview

The fellow will apply his or her knowledge of economic theory and financial principles within the structure of regulatory impacts and community budget. Within this structure, the fellow will verify and validate how public entities use analytical procedures and methods to assess the financial impact associated with compliance of effluent limitation guidelines. The fellow will consider various metrics that can be used to evaluate the level of regulatory costs that constitutes a significant impact on a public entity's budget or household's disposable income. At the completion of the project, the student will prepare a presentation of the results for senior professionals and managers and deliver associated technical reports.

Project Goals

The student will enhance his or her knowledge of the public sector's cost burden associated with compliance with effluent limitation guidelines.

Final Product of the Project

At the completion of the project, the student will prepare a presentation of the results for senior professionals and managers and deliver associated reports.

PROJECT NUMBER: 2005-110

Desired Level of Education
Graduate Student

Project Location
EPA Headquarters – Washington, DC

Preferred Project Period
6/15/2005 to 6/15/2006

Project Officer
James Darr

Project Title

Environmentally Preferable Purchasing

Sponsoring Office

Office of Pollution Prevention and Toxics

Office Mission/Responsibility

To integrate a multimedia pollution prevention ethic both within and outside EPA through support of pollution prevention efforts at the federal, state, and local levels, and to promote prevention of pollution over EPA's traditional pollution control and cleanup actions, essentially to eliminate or reduce the creation of pollution in the first place.

Project Overview

As directed by Executive Order 13101, "Greening the Government Through Waste Prevention, Recycling, and Federal Acquisition," the federal government is committed to environmentally preferable purchasing; that is, purchasing products and services that have the least impact on the environment. EPA's Final Guidance on Environmentally Preferable Purchasing (EPP) outlines the federal government's approach for incorporating environmental considerations into its purchasing decisions.

The fellow will work with specific EPP projects, chosen jointly by the fellow and the project officer, to increase awareness and understanding among consumers and the general public regarding the environmental impact of various products and services. The student will benefit in this project by understanding the current efforts being undertaken nationally among all levels of the government to promote the purchasing of green products and the difficulty purchasers have in determining the environmental impact of products. It is beneficial, but not required, that the student be familiar with these issues.

Project Goals

The fellow will identify and learn about existing programs and opportunities to expand environmentally preferable purchasing at the federal, state, and local levels.

Final Product of the Project

The fellow will write a paper describing the strengths and weaknesses of the various approaches to environmentally preferable purchasing and make recommendations for increasing the effectiveness of these programs.

PROJECT NUMBER: 2005-111

Desired Level of Education
Graduate Student

Project Location
EPA Region 2 – New York, NY

Preferred Project Period
6/1/2005 to 12/1/2005

Project Officer
Mary Thiesing

Project Title

Evaluation of Wetland Compensatory Mitigation in the Lake Ontario Basin

Sponsoring Office

Division of Environmental Planning & Protection, Water Programs Branch

Office Mission/Responsibility

Develops and implements selected water programs under the Clean Water Act, Safe Drinking Water Act, and related statutes.

Project Overview

One of the ongoing priorities for EPA's Wetlands Program is to determine the effectiveness of compensatory mitigation designed to offset impacts to wetlands and waters which are authorized by Section 404 of the Clean Water Act permits in meeting the goal of no net loss of wetland functions. A National Academy of Sciences study, which was released in 2001, determined that such mitigation does not generally succeed at offsetting impacts and that many compensatory mitigation projects perform poorly in creating healthy, self-sustaining wetlands. The United States Army Corps of Engineers (Corps), which administers the §404 permit program, is also being tasked to ensure that required compensatory mitigation actions are being taken for both authorized and unauthorized impacts to waters of the United States.

In the Lake Ontario basin, these activities affect ongoing efforts to manage and improve the health of the Lake Ontario ecosystem. The fellow will undertake a study of how effectively compensatory mitigation offsets the impacts to wetlands and aquatic resources within the Lake Ontario basin to identify areas where net impacts of §404 activities are greatest and to make recommendations for the improvement of tracking mitigation performance as well as offsetting impacts.

Project Goals

The fellow will research and learn about the authorized and unauthorized §404 impacts to aquatic resources within the Corps Buffalo District regulatory boundaries in the Lake Ontario basin and determine the status of all required compensatory mitigation. This will include review and assessment of previously issued permits and analysis of Corps and EPA enforcement actions that required compensatory mitigation. This will be conducted via review of EPA's records and the District's regulatory database and microfilm records. Upon compilation of the data, assessments will be performed on a watershed basis to determine how the national policy of "no net loss" of wetland functions and values is being supported.

Final Product of the Project

The fellow will develop a Geographic Information Systems-based map of §404 impacts and compensatory mitigation projects within the Lake Ontario basin and will prepare a final report containing an analysis of permit compliance and the overall quality, health, and sustainability of these projects as functioning wetland systems.

PROJECT NUMBER: 2005-201

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Headquarters – Washington, DC

Preferred Project Period
6/1/2005 to 8/31/2005

Project Officer
Brigid Lowery

Project Title

Testing Innovative Approaches to Waste Reduction, Land Revitalization, and Emergency Response

Sponsoring Office

Office of Solid Waste and Emergency Response/Innovation, Partnership, and Communication Office

Office Mission/Responsibility

The Office of Solid Waste and Emergency Response (OSWER) provides policy, guidance and direction for safely managing waste; preparing for, and preventing chemical and oil spills, accidents and emergencies; and cleaning up and reusing contaminated property. The Innovation, Partnership, and Communication Office (IPCO) located in OSWER is responsible for building and maintaining relationships with a wide variety of OSWER stakeholders; gaining insight into the regulatory issues and perceived barriers that challenge the environmental stewardship of these diverse interest groups; and developing partnerships and pilot projects to test new ideas and make policy recommendations on solutions to difficult environmental challenges.

Project Overview

IPCO leads a nationwide Innovations Workgroup which selects Innovation Pilots that test creative approaches to waste reduction; recycling; cleaning up contaminated land; energy recovery; and homeland security related to emergency response, prevention, and preparedness (see www.epa.gov/oswer/iwg for more information.) The Workgroup has awarded over forty grants for Innovation Pilots to universities, states, local government and environmental organizations across the country. Examples of projects include reducing Nitrogen oxides (NOx) emissions from biodiesel production; testing a market-based approach for reducing chemical use and waste at universities; exploring an innovative approach to processing food waste and its potential renewable energy applications; developing tools for smaller communities to assess risks and improve chemical emergency preparedness at chemical handling facilities; and identifying and implementing best management practices for pharmaceutical waste in hospitals.

The fellow will meet with grant recipients of Innovation Pilots nearing completion (specific Pilots to be determined); research and review Pilot results; and prepare a "lessons learned" report for each Pilot evaluated. Each Pilot should have identified performance measures at the start of the project. The fellow will utilize these performance measures as a baseline. The interviews will probably take place over the phone. The fellow may travel to some of the Pilot sites depending on IPCO's budget.

Knowledge of Miscrosoft Access is preferred, but not required.

Project Goals

The goal of this project is to evaluate the qualitative and quantitative impact of a few of the innovation Pilots. Since the Pilot topics are diverse, the fellow will have exposure to a wide variety of emerging environmental issues. The fellow will have the opportunity to interact with a diverse group of EPA managers, staff, and other professionals from across the country and have the opportunity to enhance their technical knowledge of EPA programs.

Final Product of the Project

The fellow will develop a written report on each selected Innovation Pilot. Details of the report will be negotiated with the selected fellow.

PROJECT NUMBER: 2005-202

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Region 3 – Philadelphia, PA

Preferred Project Period
6/15/2005 to 8/15/2005

Project Officer
Kristeen Gaffney

Project Title

Site Selection for Marketing to Developers

Sponsoring Office

Region 3 Hazardous Sites Cleanup Division Land Reuse Team

Office Mission/Responsibility

To put land back into productive use in a sustainable manner that will encourage smart growth and discourage sprawl.

Project Overview

The reuse of contaminated properties after restoration provides a positive resource to a community and helps reduce sprawl and its associated environmental impact to air and water quality. In many cases, restored sites can be productively reused to benefit the community. However, many sites remain stigmatized and unused even after they are cleaned up. These sites pose challenges to developers who may face uncertainty about their responsibilities if they try to redevelop the land.

To identify sites that have the best reuse potential, the student will develop an appropriate analytical approach to using site-specific information to identify target sites at which reuse might be considered. The student will also research materials on sustainable redevelopment for application to industrial sites.

Project Goals

The student will research and evaluate site-specific information to determine sites that have the best reuse potential in Mid-Atlantic states, develop Site Reuse Profiles for target sites, and apply judgment about sustainable practices that would apply to different sites. The student will gain knowledge about the impacts that land development has had and continues to have on air and water quality and what specific practices can be encouraged to reduce the negative impacts of development.

Final Product of the Project

The student will prepare a list of sites at which redevelopment would be appropriate. In addition, the student will evaluate each of these sites for sustainable practices and identify specific practices that could be used at the sites.

PROJECT NUMBER: 2005-203

Desired Level of Education
Graduate Student to Ph.D. Student

Project Location
EPA Region 4 – Athens, GA

Preferred Project Period
6/1/2005 to 6/2/2007

Project Officer
John Johnston

Project Title

Innovative Approaches to Ecological Modeling for Environmental Problem Solving

Sponsoring Office

Office of Research and Development/Ecosystems Research Division/ Ecosystems Assessment Branch

Office Mission/Responsibility

The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Overview

Environmental decision-making using the best available data and knowledge is essential. One challenge of environmental decision-making is formalizing expert knowledge about system dynamics into useful tools for managers and community and watershed groups. New techniques exist for both conceptual and simulation modeling that can be applied to natural systems for ecosystem management. Decision support tools and intelligent user interfaces are now an essential component of model development. An important outcome is the creation of models that are modular and reusable and will ultimately be accessible over the Internet.

The student(s) will choose an area of emphasis and research these new methods of management and problem solving. An example project area is riparian restoration and best management practice (BMP) determination to decrease sediment loadings and create critical habitat for productive fisheries (e.g., trophy trout in coldwater high gradient streams). An initial focus concerns the evaluation of various management scenarios and the projected response of aquatic ecosystems to stresses such as sediments, habitat loss, toxic chemicals, and nutrient inputs. Within the aquatic system there is an opportunity for aquatic plant, inverterbrate, and vertebrate community research as well as the chance to study the relationships of changes in land use, human development, agriculture, and nonpoint source pollution.

One or more students may be selected for this project.

Project Goals

The student(s) will gain experience in the new methods of management and problem solving and will have a choice in his or her area of emphasis.

Final Product of the Project

The student(s) will develop case studies and prepare a final report on the use and application of new methods of management and problem solving using conceptual and simulation modeling in a watershed.

PROJECT NUMBER: 2005-204

Desired Level of Education
Graduate Student

Project Location
EPA Region 3 – Philadelphia, PA

Preferred Project Period
6/6/2005 to 8/31/2005

Project Officer
Jose Jimenez

Project Title

Measuring Effectiveness of EMS at Federal Facilities

Sponsoring Office

Office of Enforcement, Compliance and Environmental Justice

Office Mission/Responsibility

Multi-Media Enforcement, Federal Facilities, and Environmental Justice.

Project Overview

Federal Facilities are required to develop and implement Environmental Management Systems (EMS) at each of their facilities. The student will research Federal Facilities throughout Region 3 to determine whether Federal Facilities have developed and implemented their EMS; what, if any, problems are occurring with the implementation; and what additional information and assistance is needed. The student will determine whether the facility is having environmental compliance problems, especially with Clean Water Act requirements, and if so, what type of assistance is needed. The student will provide a report on the status of EMS implementation at Federal Facilities.

Project Goals

The student will gain knowledge regarding management systems designed to help organizational efficiency and effectiveness as well as environmental regulations.

Final Product of the Project

The student will prepare a report on the findings of his or her research. The findings will include statistics on Federal Facilities' implementation of EMS.

PROJECT NUMBER: 2005-301

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Region 1 – Narragansett, RI

Preferred Project Period
6/1/2005 to 5/31/2006

Project Officer
Rob Burgess
Kay Ho

Project Title

Diagnosing Causes of Impairment in Estuarine Systems

Sponsoring Office

National Health and Environmental Effects Research Laboratory/Atlantic Ecology Division

Office Mission/Responsibility

The mission of the Atlantic Ecology Division (AED) at Narragansett is to perform research to better understand and quantify the ecological effects of anthropogenic stressors on the coastal waters and watersheds of the Atlantic seaboard.

Project Overview

Over the next several years, AED is responsible for developing diagnostic tools for assessing the causes of ecological impairment to estuarine and marine water bodies. This project involves conducting research which relates the effects of toxic chemicals, nutrients, pathogens, and clean sediments to these impairments. The focus of this research will be on ecosystems within the Narragansett Bay watershed.

The student will perform an independent and unique project involving the effects of anthropogenic stressors on estuarine and marine systems. Along with their independent project, the student will be involved in field sampling; preparing samples for analysis; and analyzing samples for toxicity, nutrients, dissolved oxygen, sediment grain size, and organic carbon.

The student's research project will include developing an experimental design, conducting the research, and completing a brief report.

Project Goals

The student's involvement in the project will allow him or her to experience all aspects of the scientific process, from the conception of his or her specific scientific question to the summarization of what his or her research means. Further, through his or her participation in AED's program, the student will gain useful and valuable experience in estuarine and marine field sampling and sample preparation and analysis.

Final Product of the Project

The student will develop a brief report summarizing the results of the project.

PROJECT NUMBER: 2005-302

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Headquarters – Arlington, VA

Preferred Project Period
6/1/2005 to 8/31/2005

Project Officer
Linda Fiedler

Project Title

New Approaches to Implementing Permeable Reactive Barriers (PRBs) for Site Cleanup

Sponsoring Office

Office of Superfund Remediation and Technology Innovation/Technology Innovation Program

Office Mission/Responsibility

EPA's Technology Innovation Program (TIP) advocates the development and application of new treatment and characterization technologies by government and industry to contaminated waste sites.

Project Overview

Each year TIP hosts several interns and fellows who conduct research and write a report on a topic related to the application of innovative technologies and approaches to clean up hazardous wastes. Topic areas that could be researched include: bioremediation, phytoremediation, chemical oxidation, detection and monitoring of dense nonaqueous phase liquids (DNAPL), cleanup costs, and brownfield site cleanups. The associated research and resulting report might be useful in fulfilling thesis requirements. Each fellow will conduct independent study with an assigned mentor who will assist in identifying resources and contacts, and help in reviewing the report.

This research project would compile and analyze information on field applications of permeable reactive barriers (PRBs) that use new construction, media, and monitoring approaches. The fellow will review published literature and databases and interview experts in the field to collect data on the way the new approaches work and on applicable site cleanups and field demonstrations.

When completing the application, students should explain in 1 or 2 sentences why the project is of interest, how their academic courses could apply, and how the project meets their personal academic goals.

Applicants may contact the project officer to discuss proposals on other projects related to innovative technologies used to clean up hazardous waste sites.

One or more students may be selected for this project.

Project Goals

Each fellow will produce a research paper. If time allows, the fellow also may work on a smaller project, such as (1) developing a status report on the use of a specific technology in the field, or (2) conducting an analysis of the results of EPA-funded academic research on cleanup-related technologies.

Final Product of the Project

Each fellow will produce a research paper related to the field applications of PRBs.

PROJECT NUMBER: 2005-303

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Headquarters – Arlington, VA

Preferred Project Period
6/1/2005 to 8/31/2005

Project Officer
Linda Fiedler

Project Title

Status of Bioremediation for Dense Nonaqueous Phase Liquids

Sponsoring Office

Office of Superfund Remediation and Technology Innovation/Technology Innovation Program

Office Mission/Responsibility

EPA's Technology Innovation Program (TIP) advocates the development and application of new treatment and characterization technologies by government and industry to contaminated waste sites.

Project Overview

Each year TIP hosts several interns and fellows who conduct research and write a report on a topic related to the application of innovative technologies and approaches to clean up hazardous wastes. Topic areas that could be

researched include: bioremediation, phytoremediation, chemical oxidation, detection and monitoring of dense nonaqueous phase liquids (DNAPL), cleanup costs, and brownfield site cleanups. The associated research and resulting report might be useful in fulfilling thesis requirements. Each fellow will conduct independent study with an assigned mentor who will assist in identifying resources and contacts, and help in reviewing the report.

This research project would compile and analyze information on laboratory and field research and demonstration projects related to the bioremediation of chlorinated solvents that occur as DNAPLs. The fellow will review published literature and databases and interview experts in the field to collect data on site cleanups and field demonstrations as well as some of the basic laboratory research on the fundamentals of this process as it is now understood.

When completing the application, students should explain in 1 or 2 sentences why the project is of interest, how their academic courses could apply, and how the project meets their personal academic goals.

Applicants may contact the project officer to discuss proposals on other projects related to innovative technologies used to clean up hazardous waste sites.

One or more students may be selected for this project.

Project Goals

Each fellow will produce a research paper. If time allows, the fellow also may work on a smaller project, such as (1) developing a status report on the use of a specific technology in the field, or (2) conducting an analysis of the results of EPA-funded academic research on cleanup-related technologies.

Final Product of the Project

Each fellow will produce a research paper related to the bioremediation of chlorinated solvents that occur as DNAPLs.

PROJECT NUMBER: 2005-304

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Region 7 – Kansas City, KS

Preferred Project Period
6/1/2005 to 8/15/2005

Project Officer
Jeffery Robichaud

Project Title

Evaluating Urban Air Pollution

Sponsoring Office

Environmental Services Division

Office Mission/Responsibility

- To protect and enhance the quality of the nation's air, water, and terrestrial environment from pollution for the benefit of all.
- Preventing or minimizing the release of pollutants into our environment by ensuring compliance with environmental laws and enforcing against those who violate these laws.
- Working in partnership with federal, tribal, state, and local agencies with whom the Environmental Services Division have shared responsibility for environmental protection.
- Working with stakeholders to implement flexible voluntary approaches to solve environmental problems.
- Conducting environmental education and outreach to the public and regulated community to enable them to prevent or reduce the generation of wastes and to become better environmental stewards.
- Making environmental quality information easily accessible to the public to enable them to make choices about the level of environmental quality they expect.
- Ensuring that all of the nation's communities have equal protection from pollution.

Project Overview

Although EPA has been regulating criteria air pollutants since the 1970 Clean Air Act was passed, many urban areas are classified as non-attainment for at least one criteria air pollutant. In these urban areas, excursions of ozone and particulate matter likely contribute to increased episodic cases of upper respiratory distress. EPA works with partners to educate the public regarding precautions that susceptible individuals may take to minimize their exposure.

The student will research, collect, and analyze available air quality data and data regarding upper-respiratory illness (primarily asthma) hospitalizations in the Region to identify and characterize trends regarding days with air quality exceedances and increased hospitalization rates. Additionally, the student will have the opportunity to assist in additional air monitoring related activities including: 1) analysis of regional ozone/Nitrogen oxides (NOx) data sets to determine monitoring sites that should be relocated or discontinued due to low value ozone data or NOx dominated 8-hour concentrations; 2) analysis of regional PM2.5 filter mass data to determine comparability with continuous monitoring instruments that may be candidates for correlated automatic continuous designation; and 3) analysis of regional PM2.5 chemical speciation datasets to examine spatial and seasonal trends in PM2.5 chemical composition with Positive Matrix Factorization analysis on select datasets for potential source apportionment.

Project Goals

By evaluating trends in urban air pollution and respiratory distress, the student will gain an understanding of the Air program and familiarize themselves with the uses and limitations of air monitoring data.

Final Product of the Project

The student will develop a report of his or her findings on the relationship between urban air pollution and associated health effects.

PROJECT NUMBER: 2005-305

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Region 1 – Narragansett, RI

Preferred Project Period
6/1/2005 to 8/30/2005

Project Officer
Lesa Meng

Project Title

Estuarine Juvenile Fish Habitats

Sponsoring Office

National Health and Environmental Effects Research Laboratory/Atlantic Ecology Division

Office Mission/Responsibility

The mission of the Atlantic Ecology Division (AED) at Narragansett is to perform research to better understand and quantify the ecological effects of anthropogenic stressors on the coastal waters and watersheds of the Atlantic seaboard.

Project Overview

This project involves developing methods to assess estuarine health using juvenile fish and their habitats. Areas of research include: 1) using fish growth rates to assess habitat quality; 2) collating and analyzing historical fish survey data to look for relationships between fish communities and human impacts; 3) developing gear and conducting fieldwork to capture fish in a variety of habitats; 4) conducting fieldwork to measure fish habitat parameters, such as sediment type, vegetation, and water quality; and 5) correlating fish collections with fish habitat measurements.

Examples of projects include: developing an index of estuarine health using historic fish survey data; linking juvenile fish and their habitats using fish and habitat data; developing unique gear to sample fish in under-sampled habitats such as marshes and sea grass; comparing fish communities in different habitats, such as marshes, marsh creeks, intertidal and subtidal areas; and comparing growth rates of fish collected in different habitats. Most of the

work is conducted outdoors from boats or in shoreline locations, and some sample analysis is done in the laboratory. After becoming familiar with the project, the student will choose an area of research within the topic and be responsible for designing, implementing, and summarizing the project.

Project Goals

The goal of the project is for the student to gain experience in marine science by participating in the development of methods to understand and quantify varying degrees of human impacts in estuaries and coastal areas by using fish and fish communities. The methods developed also are expected to enable the prediction of effects of human activities on fish communities and coastal ecosystems.

Final Product of the Project

The student will write a research paper and give a presentation on the project he or she develops.

PROJECT NUMBER: 2005-306

Desired Level of Education
Junior to Ph.D. Student

Project Location
EPA Region 4 – Athens, GA

Preferred Project Period
6/1/2005 to 6/2/2006

Project Officer
John Johnston

Project Title

Community-Based Modeling and Watershed Management Tool Development for Informed Decision-Making

Sponsoring Office

Office of Research and Development/Ecosystems Research Division/ Ecosystems Assessment Branch

Office Mission/Responsibility

The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Overview

Ecological modeling can take a variety of forms, from empirical relationships to statistical and mathematical expressions. Given that the state of knowledge in various areas of ecology is unequal in understanding and depth of theory, a need exists to use a mix of approaches to solve environmental problems. In order to deal with environmental issues in an efficient and realistic way, spatial relationships must be explored and understood as well. Readily available spatial datasets from remote sensing provide a means of evaluating large regions efficiently. Satellite data and the use of Geographic Information Systems (GIS), however, are incomplete for simulating dynamics and ecosystem processes at detailed resolutions (e.g., field plots, stream reaches). The student will apply landscape ecology principles to test the spatial patterns of data and ascertain his or her relationship (such as nested hierarchies) to ecosystem function. A mix of statistical and process understanding should be incorporated as feasible.

A number of opportunities for ecological investigation exist, including freshwater stream fisheries and upland forests. One potential project could involve relating the types and patterns of land use change in watersheds to stream habitat changes. In this case, the movement of water, sediment, and nutrients would be addressed as they relate to exposures for stream ecosystems. The student will have a choice of the types of spatial modeling (including statistical analyses) and the application to their system, or taxonomic group, of interest. Possible research topics include: investigation of patch sizes of various species; habitat preferences that relate to the size, location, and amount of edge in a given locale; and the way that an organism perceives its environment (relating to spatial scale and environmental texture).

Project Goals

The student will gain experience in landscape ecology, including the use of GIS for data analysis and hypothesis testing, and related methods for incorporating process understanding into the relationships of pattern to process (ecological function).

Final Product of the Project

The student will develop case studies and prepare a final report on the use and application of landscape ecology principles to test spatial patterns and relationships that exist in a watershed ecosystem.

PROJECT NUMBER: 2005-307

Desired Level of Education
Graduate Student to Ph.D. Student

Project Location
EPA Headquarters – Washington, DC

Preferred Project Period
6/1/2005 to 8/31/2005

Project Officer
Tom Born

Project Title

National Environmental Justice Analysis: Risk-Related Impacts from the Consumption of Self-Caught Freshwater Fish (1990-2000)

Sponsoring Office

Office of Water/Office of Science and Technology/Engineering and Analysis Division/Economic and Environmental Assessment Branch

Office Mission/Responsibility

Development of national industrial water discharge regulations.

Project Overview

The fellow will perform statistical analysis of 1990 and 2000 nationwide data sets to evaluate risk-related impacts to minority, low-income, and sensitive populations that may result from the consumption of fish caught for recreational or subsistence purposes. The data sets for analysis are generated from EPA's Risk Screening Environmental Indicators Model (RSEI), which models fish that may potentially be contaminated from industrial surface water discharges. The RSEI model integrates information on industrial toxic chemical releases with 1990 and 2000 U.S. Census Bureau data on a national digital map of 65,000 river segments and 6-million one-kilometer grid cells.

The fellow will be encouraged to creatively explore environmental justice questions related to fish consumption, such as: (1) between 1990 and 2000, have risk-related impacts increased or decreased among minority populations, or among populations of children, women of child-bearing age, or the elderly in certain regions of the United States?, and (2) are there certain regional patterns associated with disproportionate fish consumption risks, and how have such patterns changed between 1990 and 2000?.

Applicants for this position should be pursuing masters or Ph.D. degrees in environmental sciences with expertise in statistics or econometrics.

Project Goals

The main goal of the analysis is to determine whether changes have occurred in the magnitude of impacts to minority, low-income, and sensitive populations that consumed contaminated fish caught for recreational or subsistence purposes between the years 1990 and 2000. This project provides a unique research experience for students concerned with national environmental justice analysis and policy. The fellow will have the opportunity to work with national environmental justice data that have never been analyzed.

Final Product of the Project

The fellow will prepare a final report or an article for publication based on the statistical analysis of the data.

PROJECT NUMBER: 2005-308

Desired Level of Education
Graduate Student

Project Location
EPA Region 4 – Athens, GA

Preferred Project Period
7/1/2005 to 6/30/2006

Project Officer
Richard Zepp

Project Title

Ultraviolet Exposure of Coral Assemblages Due to Climate and Land-Based Human Activities

Sponsoring Office

Office of Research and Development/Ecosystems Research Division/ Immediate Office of the Director

Office Mission/Responsibility

The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Overview

Solar Ultraviolet (UV) radiation is believed to have important effects on coral assemblages, but little is known about factors that affect the UV exposure of corals. This project is designed to improve understanding of factors that influence the penetration of solar UV-B radiation into marine waters overlying corals, including the stratification of water during an El Niño event and microbial and abiotic transformations that affect the UV-absorbing dissolved and particulate components of marine environments. Results of the research will be used in conjunction with related biological studies of UV-induced corals damage to help evaluate the role played by UV radiation in the decline of corals in tropical marine environments.

Project Goals

The goals of the project are to: (1) enable the student to participate in field trips to sites located in the Florida Keys to measure solar spectral irradiance in the UV region and to collect water samples as a function of depth over corals; (2) help identify and quantify the biological sources of the dissolved and particulate constituents of the waters overlying the corals that are responsible for UV light attenuation; (3) use known techniques to extract, concentrate, identify, and quantify the UV-attenuating substances in water over and near the coral reefs, including High Performance Liquid Chromatography (HPLC) or capillary electrophoresis (CE) methods and adaptation of existing derivation techniques, to enhance sensitivity for detection by UV or fluorescence detectors; (4) conduct studies to determine the effects of microbial and photochemical degradation on the UV absorption spectra of dissolved organic matter (DOM); (5) determine rates of UV-induced DOM transformations as a function of water composition (pH, DOM concentration, iron content, salinity), wavelength, and temperature.

Final Product of the Project

The student will develop case studies and prepare a final report on the changes in UV exposure of coral assemblages caused by changes in climate and land-based human activities.

PROJECT NUMBER: 2005-309

Desired Level of Education
Graduate Student

Project Location
EPA Headquarters – Washington, DC

Preferred Project Period
6/1/2005 to 8/31/2005

Project Officer
Edwin Liu

Project Title

Analysis of Impacts of Hazardous Air Pollutants on Tribal Land

Sponsoring Office

Office of Water/American Indian Environmental Office

Office Mission/Responsibility

The American Indian Environmental Office (AIEO) coordinates the Agency-wide effort to strengthen public health and environmental protection in Indian Country, with a special emphasis on building tribes' capacity to administer their own environmental programs. AIEO oversees the development and implementation of the Agency's Indian Policy and strives to ensure that all EPA Headquarters and Regional Offices implement their parts of the Agency's Indian Program in a manner consistent with Administration policy; to work with tribes on a government-to-government basis and EPA's trust responsibility to protect tribal health and environments. AIEO's responsibilities also include: providing multi-media program development grants to tribes; negotiating tribal/EPA Environmental Agreements that identify tribal priorities for building environmental programs and also for direct, EPA program implementation assistance; developing tools to assist tribal environmental managers in their decisions on environmental priorities; developing training curricula for EPA staff on how to work effectively with tribes; and working to improve communication between the Agency and its tribal stakeholders in a number of ways, including assistance to Agency offices as they consult more closely with tribes on actions that affect tribes and their environments, and support for regular meetings of the Agency's tribal Operations Committee.

Project Overview

Emissions of hazardous chemicals present a potential risk to human health throughout the United States. EPA has the statutory authority to manage and regulate hazardous emissions. However, the Agency often delegates this authority to states. Likewise, the 72 million acres of Indian Country require protection by EPA and tribes. The student will gain knowledge and experience in determining the sources of air emissions in Indian Country and the amount of pollutants they produce.

Project Goals

The student will learn to extract information on hazardous air pollutants from the EPA National Emissions Inventory. The student will use Geographic Information Systems techniques to identify emission sources in and around tribal lands, and calculate the amounts of pollutants emitted by those sources. Finally, the student will use statistical analysis techniques to determine whether the impact of air polluters and air emissions is greater or lesser in Indian Country than in the United States as a whole.

Final Product of the Project

The student will prepare a final report on the sources of air emissions in Indian Country.

PROJECT NUMBER: 2005-310

Desired Level of Education
Graduate Student

Project Location
EPA Region 4 – Athens, GA

Preferred Project Period
6/1/2005 to 5/31/2006

Project Officer
Arthur Garrison

Project Title

Enantioselective Degradation of Chiral Pollutants

Sponsoring Office

Office of Research and Development/Ecosystems Research Division/ Processes and Modeling Branch

Office Mission/Responsibility

The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Overview

Many pesticides and other pollutants found in the environment are chiral and, therefore, exist as two or more optically active isomers called enantiomers. These enantiomers include the older persistent organochlorine pesticides, such as o.p.'-DDT, is- and trans-chlordane, and alpha-H.H., as well as the less persistent pesticides currently in use, such as organophosphates, pyrethroids, and conazoles. Biological systems are generally enantiomerically selective, meaning one enantiomer is more bioavailable or toxic than the other and that one degrades faster than the other by microbial pathways.

This project will consist of experiments to follow the degradation processes of chiral pollutants in various environmental matrices to determine the degree of enantioselectivity of the process. The student will develop analytical techniques based on capillary electrophoresis with chiral selectors and/or gas or high pressure liquid chromatography with chiral columns to separate the enantiomers of selected chiral pollutants. The student will then apply these techniques to real or simulated environmental samples that are spiked with or known to be contaminated with the chiral pollutants to determine the extent of enantiomeric selectivity of the environmental process.

Project Goals

This research will provide the student with experience in adaptation and application of an analytical technique to a real environmental problem. Knowledge of the relative persistence of the enantiomers of a pollutant will improve assessment of environmental and human exposure to the pollutant.

Final Product of the Project

The student will prepare a scientific publication on enantioselective degradation of pollutant enantiomers in environmental matrices.

PROJECT NUMBER: 2005-311

Desired Level of Education
Graduate Student

Project Location
EPA Region 2 – New York, NY

Preferred Project Period
6/1/2005 to 12/1/2005

Project Officer
Barbara Belasco

Project Title

Lake Ontario Coastal Wetlands Indicators

Sponsoring Office

Division of Environmental Planning and Protection

Office Mission/Responsibility

The Division of Environmental Planning and Protection develops and coordinates the implementation of place-based plans to address identified environmental problems, with particular emphasis on the multi-media nature of environmental problems, and provides technical support in evaluating the fate and effects of pollutants in water, sediment, and biota.

Project Overview

This project requires the fellow to work in concert with U.S. federal and state agencies, Canadian agencies, and academia and non-governmental organizations to identify monitoring information on the coastal wetlands of Lake Ontario. The region has identified a variety of sources of information which will be used to initiate the project. Information will be used to identify and recommend possible indicators of wetland quality which could be developed for the evaluation of coastal wetland conditions and be adopted by the Lake Ontario Lakewide Management Plan (LaMP) as "LaMP indicators." Recommended indicators should be cost-effective, practical, and easily integrated into a monitoring program and specific attention should be paid to any fish and wildlife habitat issues that may be affected by the International Joint Commission's possible up-coming changes to existing lake level controls. The student will identify existing data gaps for indicators that are recommended.

The student will compile a list of coastal wetlands monitoring data available and identify both existing data as well as data gaps in coastal wetlands knowledge. The student will catalogue ongoing monitoring programs and develop recommendations for the planning and development of a bi-national monitoring program for possible future implementation by the Lake Ontario LaMP and its partners.

Project Goals

The goals of the project include: 1) to identify, collect, and compile existing data on coastal wetland indicators; 2) evaluate the data and identify potential indicators for Lake Ontario coastal wetlands; 3) to identify data gaps in the development of coastal wetland indicators for Lake Ontario; 4) to develop recommendations for the planning and development of a bi-national monitoring program.

The student will be provided an opportunity to network on a bi-national level with groups that are conducting or sponsoring wetlands work. This project is beneficial to those groups as well. In addition, the project will allow the student to become familiar with a developing area of wetland science (i.e., the analysis of wetlands conditions using indicators) and to experience firsthand the link between the development of the science and the application of the science to a public purpose.

Final Product of the Project

The final product will be negotiated when the student begins the fellowship.

PROJECT NUMBER: 2005-312

Desired Level of Education
Junior to Ph.D. Student

Project Location
EPA Region 4 – Athens, GA

Preferred Project Period
6/1/2005 to 5/30/2006

Project Officer
Tim Collette

Project Title

Fate of Pesticides and Toxic Chemicals During Drinking Water Treatment

Sponsoring Office

Ecosystems Research Division/PMB

Office Mission/Responsibility

The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Overview

All relevant routes of human consumption must be considered in risk assessments for anthropogenic chemicals. A large percentage of the United States population consumes treated drinking water (DW), and monitoring data is available for important pesticides and toxic chemicals in DW sources (both surface and ground water). However, very little monitoring data exists for these chemicals in finished DW. Limited experimental studies show that some chemicals are partially removed by conventional water treatment processes, and some are transformed by chemical reactions that occur during treatment. Transformations of some chemicals have been shown to produce products that are more toxic than the parent compound.

The objectives of this project are to: 1) provide chemical specific information on the effects of water treatment for high priority pollutants, 2) provide physicochemical parameters for transformation products, and 3) develop predictive models for forecasting treatment effects that cross chemical class and treatment conditions. The fellow will participate in experiments directed at: measuring chemical transformation rates for disinfection and water softening processes, identifying transformation products for disinfection and water softening processes, and investigating the influence of varying treatment conditions on DW treatment effects of organic chemicals.

Project Goals

The goal of the project is to research methods, tools, and databases to forecast the fate of pesticides and toxic chemicals during the DW treatment process. The early task outputs will be chemical specific information from bench scale studies that simulate DW disinfection and softening. The fellow will participate in all phases of the bench scale studies, which will provide him or her with the experience, knowledge, and skills to conduct scientific research projects.

Final Product of the Project

The student will maintain a notebook of data and results and will present both an oral presentation and a written report on pesticide transformation studies.

PROJECT NUMBER: 2005-313

Desired Level of Education
Freshman to Ph.D. Student

Project Location
EPA Region 4 – Athens, GA

Preferred Project Period
6/1/2005 to 6/2/2008

Project Officer
Jackson Ellington

Project Title

Metabolic Fate of Selected Chemicals: Kinetics of Degradation and Identification of Metabolites

Sponsoring Office

Office of Research and Development, National Exposure Research Laboratory

Office Mission/Responsibility

The mission of the Office of Research and Development (ORD) is to perform research and development to identify, understand, and solve current and future environmental problems; to provide responsive technical support to EPA's mission; to integrate the work of ORD's scientific partners; and to provide leadership in addressing emerging environmental issues and in advancing the science and technology of risk assessment and risk management.

Project Overview

The proposed research will require investigating metabolic pathways (metabolism maps) for selected chemicals in vitro using rat microsomes. Delineation of the metabolic pathways for several members of a class of chemicals of environmental concern will contribute to the refinement and testing an existing metabolism simulator. The focus of the research should be on reaction types of most concern for the effect endpoint being predicted (endocrine disruption) and for which additional information will greatly enhance the reliability of model predictions. Initial choices of reaction types for metabolism pathway and rate studies are based upon two primary criteria: 1) metabolic transformations that are most likely to increase toxicity for the effect endpoint of concern; and 2) metabolic transformations which are currently simulated with low reliability. The reaction types initially proposed for study should be those that result in hydroxylated metabolites (oxidation and O-dealkylation), which are expected to bind endocrine receptors (ER) with greater affinity than the parent chemical.

ERD in Athens, Georgia has initiated in vitro metabolism studies using rat microsomes to track chemical transformation and metabolite formation for a select group of chemicals. Analytical methods for metabolite identification, utilizing gas chromatography/mass spectrometry (GC/MS), liquid chromatography (LC)/MS, and nuclear magnetic resonance spectroscopy, are currently being developed and will be applied to metabolism studies. The student will use traditional experimental methods and advanced analytical techniques (e.g., LC-MS-MS negative and positive ion mass spectrometry) for measuring metabolic rate and identifying metabolites in vivo and in vitro for the selected class chemicals.

Project Goals

The student will receive training in planning laboratory experiments and will use computer controlled equipment in the conduct of the experiments and in the collection and analysis of data. The student will gain knowledge in the state of the science in the metabolism of chemicals and the use of such data in computational toxicology based risk assessment.

Final Product of the Project

The student will prepare a report to summarize the results of the research on the metabolic fate of selected chemicals.

PROJECT NUMBER: 2005-314

Desired Level of Education
Graduate Student to Ph.D. Student

Project Location
EPA Headquarters -- Washington, DC

Preferred Project Period
6/1/2005 to 8/31/2005

Project Officer
Margaret Conomos

Project Title

Analyzing the Health and Economic Outcomes of Reduced Lead Exposures

Sponsoring Office

Office of Environmental Information

Office Mission/Responsibility

The Office of Environmental Information (OEI) is responsible for establishing an innovative center of excellence that advances the creation, management, and use of information as a strategic resource at EPA. OEI helps ensure that EPA collects high quality environmental information and makes it available to the American public. OEI provides guidance to assist the Agency about the way it collects, manages, analyzes, and provides and allows access to environmental information. By fulfilling these activities, OEI expects that the public and policymakers can make informed decisions.

Project Overview

The removal of lead from paint (1978) and gasoline (1991) represents two fundamental measures towards the mitigation of elevated U.S. pediatric blood lead levels (BLL). What has been the outcome of these measures? Recent studies on the effects of lead exposure suggest that lead may stunt brain growth, resulting in learning disabilities in children; contribute to patterns of violent behavior in teens; and mental dysfunction in the elderly. One study showed that as the amount of lead released in the environment via paint and auto exhaust rose and fell through the decades, so did a broad range of reported violent crimes, including rape; robbery; assault; and murder. Another association that could be investigated for a consistent pattern is the amount of lead released and academic test score performance, such as SATs. Past studies have shown that test scores declined as lead levels increased. Can the benefits of decreasing levels of lead be revealed in increasing test scores, and can economic benefits be associated with increased test scores, such as the ability to keep a good-paying job? Would improved IQs reduce criminal behavior?

The fellow will investigate impoverished rural communities and cities, such as Chicago, Illinois; Milwaukee, Wisconsin; Providence, Rhode Island; Newark, New Jersey; Philadelphia, Pennsylvania; and Boston, Massachusetts and adjust for confounders such as poverty. Data from EPA, Census Bureau, the Federal Bureau of Investigation, the Department of Labor, and the National Center for Health Statistics will be useful in the investigation. Many confounding factors exist, and this investigation is not expected to demonstrate causality, but rather to suggest associations and build upon the current literature. Using Geographic Information Systems (GIS) mapping technology in public health as well as time series and statistical analysis, the fellow will develop a predictive model for the health and economic outcomes of lead exposure.

Sources include:

Needleman, H.L. et al. (1979) Deficits in psychology and classroom performance of children with elevated dentine lead levels. *The New England Journal of Medicine*, 300, 689-695.

Bellinger, D. et al. (1987) Longitudinal analyses of prenatal and postnatal lead exposure and early cognitive development. *The New England Journal of Medicine*, 316, 1037-1042.

Needleman, H.L. et al. (1990) Low-level lead exposure and the IQ of children. A meta-analysis of modern studies. *Journal of the American Medical Association*, 263, 673-678.

Needleman, H.L. et al. (1996) Bone lead levels and delinquent behavior. *Journal of the American Medical Association*, 275, 363-369.

EPA Office of Children's Health Protection http://yosemite.epa.gov/ochp/ochpweb.nsf/content/blood_lead_levels.htm.

Project Goals

The fellow will research and evaluate the health and economic outcomes associated with a reduction in lead exposures. The fellow will gain knowledge in GIS technology and statistical analysis, and the application of these

methods in measuring environmental outcomes. The project will help in the development of new tools that can be used to monitor and assess public health with respect to the environment.

Final Product of the Project

The fellow will develop a final presentation and a technical report to evaluate the relationship between lead exposure and cognitive development and violent behavior. The report will provide the basis for one or more publications.

PROJECT NUMBER: 2005-315

Desired Level of Education
Graduate Student

Project Location
EPA Region 9 – Las Vegas, NV

Preferred Project Period
6/1/2005 to 8/25/2005

Project Officer
Andrea Stafford

Project Title

Data Analysis of Historical Hydrological Monitoring

Sponsoring Office

Office of Air and Radiation/Office of Radiation and Indoor Air/Radiation and Indoor Environments National Laboratory

Office Mission/Responsibility

Our mission is to protect the public and the environment by minimizing exposure to radiation and indoor air pollution through environmental measurements, applied technologies, and education.

Project Overview

Under an Interagency Agreement with the Department of Energy, EPA's Radiation and Indoor Environments National Laboratory conducts a Long-Term Hydrological Monitoring Program to measure radioactivity concentrations in water sources near the sites of former underground nuclear explosions. Sampling and analysis of water samples is being performed at eight sites in five states on a yearly basis, and the results obtained each year provide assurance that radioactive materials have not migrated into drinking water supplies.

Project Goals

The student will perform data analysis and prepare a graphic representation of historical sampling and analysis data obtained over the last thirty years. Data from individual sites will be reviewed and validated for mega-trends, micro-trends, and displayed on digital graphical maps.

Final Product of the Project

The student will perform historical data analysis, including review and validation, and prepare digital graphical maps for ease in understanding analyses.

PROJECT NUMBER: 2005-401

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Region 2 – New York, NY

Preferred Project Period
6/6/2005 to 8/26/2005

Project Officer
Chris Sebastian

Project Title

Public Affairs Fellow

Sponsoring Office

Public Affairs Division

Office Mission/Responsibility

The Public Affairs Division serves as EPA's focal point for relations with the media; Congress, state, and local elected officials; public interest groups; and concerned community members and works to ensure that the public is informed about EPA policies and programs.

Project Overview

The student will have the opportunity to participate in a broad range of public relations and communications activities, including researching and analyzing environmental information of interest to the public and other appropriate projects related to communicating information to the public.

Project Goals

The goal of the project is for the student to gain broad-based knowledge and experience in the Agency's public affairs activities.

Final Product of the Project

The student will have the opportunity to participate in various activities associated with public outreach materials.

PROJECT NUMBER: 2005-402

Desired Level of Education
Graduate Student

Project Location
EPA Region 9 – Las Vegas, NV

Preferred Project Period
6/1/2005 to 8/25/2005

Project Officer
Andrea Stafford

Project Title

Environmental Management Systems Outreach

Sponsoring Office

Office of Air and Radiation/Office of Radiation and Indoor Air/Radiation and Indoor Environments National Laboratory

Office Mission/Responsibility

Our mission is to protect the public and the environment by minimizing exposure to radiation and indoor air pollution through environmental measurements, applied technologies, and education.

Project Overview

Utilizing a previously developed environmental questionnaire and scorecard, the student will have the opportunity to research and gain knowledge of current best practices that lead to a more sustainable future while also inspiring environmental accountability. The environmental questionnaire is an integrated and consumer-friendly "green" scorecard that can be used by individuals to determine how "green" they are and to recognize the benefits and costs of the decisions they make relative to the environment.

Project Goals

The project will enable the student to learn about environmental accountability and sustainable best practices.

Final Product of the Project

The student will prepare an analysis of questionnaire and scorecard results, a presentation to laboratory staff, and develop an R&IE/EMS website prototype.

PROJECT NUMBER: 2005-403

Desired Level of Education
Junior to Graduate Student

Project Location
EPA Headquarters – Arlington, VA

Preferred Project Period
6/1/2005 to 8/31/2005

Project Officer
Suzanne Wells

Project Title

Superfund Community Involvement and Outreach Activities

Sponsoring Office

Office of Superfund Remediation and Technology Innovation, Community Involvement and Outreach Branch

Office Mission/Responsibility

The mission of the Superfund program is to reduce risks to people and the environment by cleaning up the nation's worst hazardous waste problems. The mission of the Superfund Community Involvement Program is to advocate and strengthen early and meaningful community participation during Superfund cleanups.

Project Overview

The Community Involvement Program seeks to build capacity in communities so that citizens may effectively participate in the Superfund process. This project with the Community Involvement and Outreach Branch requires that the student become familiar with the Superfund process and how public participation processes are implemented during cleanups. Building capacity in communities may focus on providing technical assistance and/or providing communities the opportunity to form advisory groups to discuss site activities and resolve issues. In addition, the Community Involvement and Outreach Branch works to establish dialogues with the public on critical issues facing communities near Superfund sites. The specific project will depend on emerging issues at the time of the application review.

Students applying for this fellowship must have good writing skills and be able to perform basic research, critical analysis, and synthesis of information from multiple sources. In addition, the students should have knowledge of community involvement and conflict resolution.

Project Goals

To help the student learn critical issues facing a government agency as it seeks to involve the public in decision making. The student will learn to analyze emerging issues or topics and to gain experience in developing strategies for managing the issues and topics.

Final Product of the Project

The student will develop a final presentation based on the assigned project.

PROJECT NUMBER: 2005-404

Desired Level of Education
Graduate Student

Project Location
Student's Academic Institution

Preferred Project Period
6/1/2005 to 6/1/2008

Project Officer
Kathleen MacKinnon
Ginger Potter

Project Title

How Effective is Environmental Education?

Sponsoring Office

Office of Environmental Education

Office Mission/Responsibility

The mission of the Office of Environmental Education (OEE) is to support education efforts that develop an environmentally conscious and responsible public. As authorized under the National Environmental Education Act, OEE administers various programs such as grants, educator training, college fellowships, and youth awards. OEE also facilitates partnerships that support and advance the field of environmental education.

Project Overview

The purpose of this project is to conduct research on specific aspects of environmental education (EE). The student(s) will conduct research and prepare a paper documenting the results of the research on one of the following topics: (1) How effective is EE in meeting environmental protection goals? Can it be demonstrated that EE is a valid tool in meeting the nation's environmental protection goals (such as clean air, clean water, and safe foods)? What anecdotal evidence and research studies support this cause-and-effect relationship?; (2) To what extent does EE improve student academic performance when integrated within various core subjects (such as science, social studies, language arts, etc.)? What specific characteristics of an EE program and/or what instructional practices have the greatest impact on student performance? What are the implications of this research for linking EE with state and national education reform efforts?; or (3) How effective is EE training for educators in the United States (pre-service, in-service, or nonformal education)? What are the most effective models and why?

This project will be conducted at the selected student's academic institution. The student(s) must work under the supervision of a faculty member who is knowledgeable about education and/or EE.

One or more students may be selected for this project.

Project Goals

The student(s) will conduct research on the aspects of EE that further enhances the field. The student(s) will gain knowledge of the current research in EE and add to the growing body of research demonstrating the efficacy of EE in protecting human health and the environment and improving student achievement.

Final Product of the Project

The student's master's thesis or doctoral dissertation.

PROJECT NUMBER: 2005-405

Desired Level of Education
Graduate Student to Ph.D. Student

Project Location
EPA Headquarters – Washington, DC

Preferred Project Period
6/1/2005 to 12/31/2005

Project Officer
Drew Burnett

Project Title

Inventory of Environmental Education in the National Estuary Program

Sponsoring Office

Office of Environmental Education

Office Mission/Responsibility

The mission of the Office of Environmental Education (OEE) is to support education efforts that develop an environmentally conscious and responsible public. As authorized under the National Environmental Education Act, OEE administers various programs such as grants, educator training, college fellowships, and youth awards. OEE also facilitates partnerships that support and advance the field of environmental education.

Project Overview

EPA's National Estuary Program (NEP) was established by Congress in 1987 to improve the quality of estuaries of national importance. Currently, there are 28 programs nationwide. Each program is a consortium of local government agencies, businesses, and non-profit organizations that are responsible for the development of a Comprehensive Conservation and Management Plan (CCEP) to guide the conservation and protection of the estuary. Activities include: protecting public water supplies; protecting the propagation of a balanced, indigenous population of shellfish, fish, and wildlife; allowing recreational activities, both in and on water; and controlling point and nonpoint sources of pollution to supplement existing pollution controls. Many of the CCEPs include education strategies and/or activities that benefit people living in the watershed.

The fellow will be based in EPA's Headquarters offices in Washington, DC. At the start of the project, the fellow will receive an orientation to NEP, meet office staff, select specific programs for participation in the study, and establish a travel schedule. The fellow will then travel to the selected programs to speak with the NEP Education/Outreach Coordinator and partners and observe EE activities first hand. The final 6 weeks of the project will be spent in Washington, DC analyzing the research and writing a report.

Project Goals

The fellow will: 1) Conduct research of current EE strategies and/or activities in each selected NEP program, including audiences (e.g., Kindergarten through –12th grade, adult), methodologies (e.g., formal and non-formal), materials (e.g., curricula, videos, CD-ROM, etc.), evaluation methodologies (i.e., performance measures, outputs, outcomes, etc.), and partnerships developed, and 2) Complete an analysis of the inventory and write a report comparing and contrasting the various strategies used in each program. Details of the report will be negotiated with the selected fellow.

Final Product of the Project

The fellow will write a final report that includes his or her analysis of the data collected. Details of the report will be negotiated with the selected fellow.

Appendix A – Application Materials

A complete set of application materials is included in this appendix. Electronic versions of the forms can be downloaded from EPA's web site at ***www.epa.gov/enviroed/students.html***. The forms are available in an interactive portable document format (pdf) and can be completed online, then printed and mailed to EPA as described in the *How to Apply* section on page 5.

Helpful Tips:

- **Be sure to carefully read the section, *How to Apply*, on page 5 for detailed instructions on applying for a NNEMS fellowship**
- **Confirm that you meet all of the eligibility requirements described on page 5**
- **Include a transcript for each school attended**
- **Indicate on the application whether the Reference Form(s) will be sent under separate cover**
- **Type or complete online the application. If handwritten, write as neatly as possible**
- **Review the application to check for typographical or grammatical errors**
- **Mail the application so that it is postmarked on or before January 15, 2005**

EPA's National Network for Environmental Management Studies Fellowship Program

APPLICATION

Program Announcement Identifier: EPA-OEE-05-01

An interactive PDF version of this form is available online at *www.epa.gov/enviroed/NNEMS/2005apply.html*

Project Information

Project Number: 2005- _____

Project category:

- ❑ Environmental Policy, Regulation, and Law
- ❑ Environmental Management and Administration
- ❑ Environmental Science
- ❑ Public Relations and Communications
- ❑ Computer Programming and Development

If you are applying for more than one NNEMS project, please indicate:

_____ Total number of NNEMS projects for which you are applying

_____ Order of preference for this project (1 = most preferred)

You must complete a separate application for each project for which you are applying.

Applicant Information

_____
Name

Please check the address to which you would like materials sent.

❑ Current Mailing Address

_____

_____

_____ _____ _____
City State Zip

At Current Address Through _____ (month/year)

Current Phone: (_____) _____ - _____

Current Email: _____

❑ Permanent Mailing Address

_____

_____

_____ _____ _____
City State Zip

Permanent Phone: (_____) _____ - _____

Permanent Email: _____

_____
School/University

Current Student Level:

Undergraduate	Advanced
❑ Associate	❑ Graduate
❑ Freshman	❑ Ph.D.
❑ Sophomore	
❑ Junior	
❑ Senior	

Current Major/Minor: _____

Expected Graduation Date: _____

Please list any additional universities attended:

School/University	Dates Attended	Transcript Enclosed
		❑Yes ❑No
		❑Yes ❑No
		❑Yes ❑No

_____
Names of Individuals Providing Reference

Eligibility

A NNEMS fellowship is available to any associate, undergraduate, or advanced student who is:

- A citizen of the U.S., its territories or possessions, or lawfully admitted to the U.S. for permanent residency
- Enrolled for academic credit at an accredited educational institution*
- Pursuing an educational program directly related to pollution control or environmental protection for the duration of the fellowship

Please note: The following types of students are not eligible for a NNEMS fellowship:

- *Federal employees, including those who are on "leave without pay" status*
- *Undergraduate and graduate students who will graduate before the NNEMS fellowship is completed. (Students who complete their undergraduate studies before the end of a fellowship may apply if currently accepted or enrolled to a graduate program.)*
- *High school students*

Additional requirements for associate,undergraduate, and advanced students include the following:

Associate and Undergraduate Students

- 3.0 cumulative grade point average (GPA) based on a scale of 4.0 at the time that the application is due (a GPA of 2.999, for example, is not sufficient)
- Completion of at least four courses related to the field of environmental studies

Advanced Students

- Currently enrolled in a graduate or Ph.D. program or can provide proof of acceptance and enrollment to a graduate or Ph.D. program at the time of fellowship award. Students who are awaiting notification of acceptance must submit verification of acceptance and enrollment at the time of fellowship award.
- Completion of one semester of graduate or Ph.D. work, or at least four undergraduate courses related to the field of environmental studies

* The 2- or 4-year college, university, or distance-learning institution must be accredited by a regional or national accrediting organization recognized by the U.S. Department of Education or the Council for Higher Education Accreditation (***www.chea.org***).

Project Number: 2005-_____

APPLICATION

Proposal

You may attach one additional page as necessary.

Proposed Research Plan: Describe how you would conduct your research on this project.

Relevant Information: Describe your academic, professional, or relevant experience that you believe qualifies you to conduct this research. For example, identify academic courses or research that enhances your qualifications.

Academic Goals: State how you expect this project to support your academic and professional goals.

Application Package Checklist

Please verify that you:

	Yes	No
Are a citizen of the U.S., its territories or possessions, or lawfully admitted to the U.S. for permanent residency	❑	❑
Are enrolled at an accredited school	❑	❑
Are not a federal employee	❑	❑
Have a minimum 3.0 GPA	❑	❑

Confidential Information

Does your application package contain information that you consider to be confidential?

❑ Yes ❑ No

Be sure to clearly mark confidential information

Students must submit **four** complete application packages for each project (one original and three copies). Please note that only one official transcript is required which may be opened and copied, even if a student is applying for multiple projects. Please verify that you have included:

	Original	3 Copies	Mailed Separately
A completed Application Form	❑	❑	❑
A résumé	❑	❑	❑
An official college transcript from each school attended	❑	❑	❑
A Reference Form from a professor or advisor	❑	❑	❑
A completed NNEMS Disclosure and Waiver Statement	❑	❑	❑
Verification of acceptance and/or enrollment in a graduate or Ph.D. program if applicant is a graduating senior	❑	❑	❑

Separate, complete application packages must be submitted for each NNEMS project.

Applications must be postmarked on or before **January 15, 2005**.

Mail Completed Application Package to:
NNEMS Fellowship Program
Tetra Tech EM Inc.
1881 Campus Commons Drive, Suite 200, Reston, VA 20191

EPA's National Network for Environmental Management Studies Fellowship Program

APPLICATION

Program Announcement Identifier: EPA-OEE-05-01

An interactive PDF version of this form is available online at *www.epa.gov/enviroed/NNEMS/2005apply.html*

Project Information

Project Number: 2005- XXX

Project category:

- ☒ Environmental Policy, Regulation, and Law
- ☐ Environmental Management and Administration
- ☐ Environmental Science
- ☐ Public Relations and Communications
- ☐ Computer Programming and Development

If you are applying for more than one NNEMS project, please indicate:

3 Total number of NNEMS projects for which you are applying

1 Order of preference for this project (1 = most preferred)

You must complete a separate application for each project for which you are applying.

Applicant Information

John Doe
Name

State University
School/University

Please check the address to which you would like materials sent.

☒ Current Mailing Address

123 Hill Street

Anytown (City) VA (State) 00000 (Zip)

At Current Address Through May 2005 (month/year)

Current Phone: (123) 456 - 7891

Current Email: johndoe@email.com

☐ Permanent Mailing Address

City State Zip

Permanent Phone: ( ) -

Permanent Email:

Current Student Level:

Undergraduate	Advanced
☐ Associate	☐ Graduate
☐ Freshman	☐ Ph.D.
☐ Sophomore	
☒ Junior	
☐ Senior	

Current Major/Minor: Environmental Policy

Expected Graduation Date: June 2006

Please list any additional universities attended:

School/University	Dates Attended	Transcript Enclosed
		☐Yes ☐No
		☐Yes ☐No
		☐Yes ☐No

Dr. Jane Doe
Names of Individuals Providing Reference

Eligibility

A NNEMS fellowship is available to any associate, undergraduate, or advanced student who is:

- A citizen of the U.S., its territories or possessions, or lawfully admitted to the U.S. for permanent residency
- Enrolled for academic credit at an accredited educational institution*
- Pursuing an educational program directly related to pollution control or environmental protection for the duration of the fellowship

Please note: The following types of students are not eligible for a NNEMS fellowship:

- *Federal employees, including those who are on "leave without pay" status*
- *Undergraduate and graduate students who will graduate before the NNEMS fellowship is completed. (Students who complete their undergraduate studies before the end of a fellowship may apply if currently accepted or enrolled to a graduate program.)*
- *High school students*

Additional requirements for associate,undergraduate, and advanced students include the following:

Associate and Undergraduate Students

- 3.0 cumulative grade point average (GPA) based on a scale of 4.0 at the time that the application is due (a GPA of 2.999, for example, is not sufficient)
- Completion of at least four courses related to the field of environmental studies

Advanced Students

- Currently enrolled in a graduate or Ph.D. program or can provide proof of acceptance and enrollment to a graduate or Ph.D. program at the time of fellowship award. Students who are awaiting notification of acceptance must submit verification of acceptance and enrollment at the time of fellowship award.
- Completion of one semester of graduate or Ph.D. work, or at least four undergraduate courses related to the field of environmental studies

* The 2- or 4-year college, university, or distance-learning institution must be accredited by a regional or national accrediting organization recognized by the U.S. Department of Education or the Council for Higher Education Accreditation (***www.chea.org***).

Project Number: 2005- XXX

APPLICATION

Proposal

You may attach one additional page as necessary.

Proposed Research Plan: Describe how you would conduct your research on this project.

Some well-placed phone calls can save a lot of time in the library, so my investigation would begin with a week or two of phone interviews with a range of people already familiar with (1) wetland protection issues, and (2) the impact of USAID, World Bank and IUCN policies on environmental media. I would include USAID and World Bank program officers, UNEP officers, UNEP officials, public interest organizations with international environmental programs, and academic specialists, as well as people within EPA.

Then I would select three or four organizations to represent the range of agencies active internationally (Bilateral, Multilateral, Quasigovernmental). I would look at specific programs or projects currently under way at these agencies to assess wetland impact. I would also analyze the organizational structures and political context in which these agencies operate to gain a grasp of how these factors influence their projects on wetlands, as well as the legal authorities of these agencies.

(continued on attached sheet)

Relevant Information: Describe your academic, professional, or relevant experience that you believe qualifies you to conduct this research. For example, identify academic courses or research that enhances your qualifications.

Though I do not have a background in wetlands or water issues in general, I have been working for the past five years on international pesticide issues. I am already familiar with some of the mechanisms currently in place at the World Bank and USAID to regulate how their funds are used for pesticides. Last year, I wrote Problem Pesticides, Pesticide Programs and Analysis of the International Code of Conduct on the Distribution and Use of Pesticides approved in November 1986 by the FAO, as well as a guide on how to monitor for compliance with the code.

Academic Goals: State how you expect this project to support your academic and professional goals.

I would expect my end project to be a report summarizing the impacts these agencies are having on wetlands, along with a substantive analysis of the legal and political factors driving these impacts. The report would also include specific recommendations for policy changes. This project would allow me to gain hands-on experience in international policy as it relates to environmental issues, which dovetails with the Environmental Management program I am pursuing. This real world experience would reinforce the topics I have studied in school, allow me to explore wetlands issues in more depth, and give me crucial background experience to help me find a job in the environmental public policy field upon graduation.

Application Package Checklist

Please verify that you:

	Yes	No
Are a citizen of the U.S., its territories or possessions, or lawfully admitted to the U.S. for permanent residency	☒	☐
Are enrolled at an accredited school	☒	☐
Are not a federal employee	☒	☐
Have a minimum 3.0 GPA	☒	☐

Confidential Information

Does your application package contain information that you consider to be confidential?

☐ Yes ☒ No

Be sure to clearly mark confidential information

Students must submit **four** complete application packages for each project (one original and three copies). Please note that only one official transcript is required which may be opened and copied, even if a student is applying for multiple projects. Please verify that you have included:

	Original	3 Copies	Mailed Separately
A completed Application Form	☒	☒	☐
A résumé	☒	☒	☐
An official college transcript from each school attended	☒	☒	☐
A Reference Form from a professor or advisor	☒	☒	☐
A completed NNEMS Disclosure and Waiver Statement	☒	☒	☐
Verification of acceptance and/or enrollment in a graduate or Ph.D. program if applicant is a graduating senior	☐	☐	☐

Separate, complete application packages must be submitted for each NNEMS project.

Applications must be postmarked on or before **January 15, 2005**.

Mail Completed Application Package to:
NNEMS Fellowship Program
Tetra Tech EM Inc.
1881 Campus Commons Drive, Suite 200, Reston, VA 20191

EPA's National Network for Environmental Management Studies Fellowship Program

REFERENCE FORM

Instructions for the Reference

Thank you for providing a reference for a NNEMS fellowship applicant. Before you begin, please note that this reference is not intended to be confidential. Please submit the completed form to the applicant identified below, to be included in the application package. You may submit the reference under separate cover at the address provided below, but it must be postmarked on or before **January 15, 2005**:

NNEMS Fellowship Program
Tetra Tech EM Inc.
1881 Campus Commons Drive, Suite 200
Reston, VA 20191

To be Completed by Applicant

Project Number: 2005-_____

Applicant's Name:_____

Current Mailing Address

_____

_____

_____ _____ _____
City State Zip

Current Phone: (_____) _____ - _____

Current Email: _____

School/University:_____

Current Major/Minor:_____

Expected Graduation Date:_____

To be Completed by the Reference

_____
Name of Individual Providing Reference

Current Mailing Address

_____

_____

_____ _____ _____
City State Zip

Current Phone: (_____) _____ - _____

Current Email: _____

Position or Title:_____

Department:_____

Institution:_____

_____
Signature Date

Reference

The applicant named above is applying for a NNEMS fellowship. What are your personal impressions of the candidate's ability to perform the proposed research project? Include how the research project relates to and will further the student's academic goals. Please comment on the quality of his or her work, and promise of productive scholarship. Please explain in what capacity you have known the applicant and for what time period. (Continue on next page, if necessary.)

Reference: (continued from previous page)

Rating:

Please rate this student in overall promise in comparison with other individuals with whom you have known at similar stages in their academic studies by checking the appropriate boxes.

	Outstanding	Excellent	Good	Fair	Poor	Not Applicable
Academic Performance						
Motivation for Proposed NNEMS Research Plan						
Research and Writing Ability						
Leadership Skills and Written Communication Skills						

NNEMS DISCLOSURE AND WAIVER STATEMENT

Please complete and submit with NNEMS application package. This form may be photocopied.

I understand that the National Network for Environmental Management Studies (NNEMS) Program fellows are not employees of the U.S. Environmental Protection Agency (EPA) or the U.S. government. Thus, if selected to be a NNEMS fellow, I will not receive typical federal employee benefits including, but not limited to, health insurance, life insurance, annual leave, and sick leave.

In addition, I understand that in the event of an accident causing injury to myself while either performing my assigned functions or traveling, the U.S. government is not liable for any injury or harm I may incur. Further, I understand that the U.S. government is not liable for any injury or harm I may cause another person or persons while performing my assigned functions or traveling for EPA. As such, I understand that I am responsible for any injury or harm I cause to myself or others as a result of my actions.

By signing this form, I acknowledge that I fully understand the provisions contained in this statement regarding my status as a NNEMS fellow and the consequences of my actions while working as a NNEMS fellow. As a result, I have considered the possibility of obtaining personal insurance during my NNEMS fellowship.

Name: _____ School: _____

Home Address: _____ Project # Applied For: 2005 - _____

_____ Project Category: _____

_____

_____

Home Phone Number: _____

Signature: _____ Date: _____

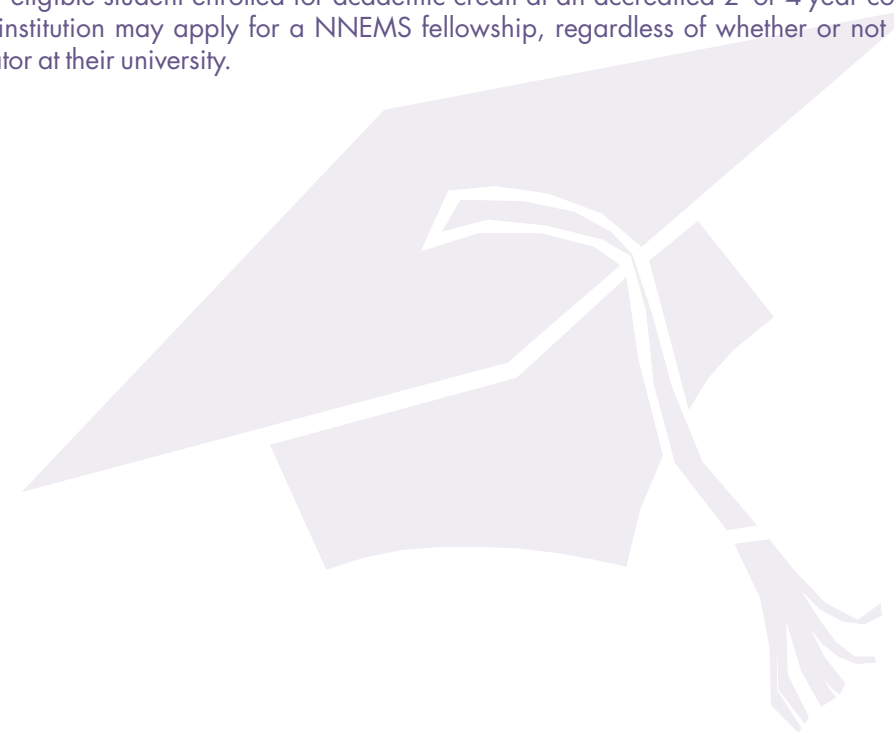
Appendix B – NNEMS Program Coordinators

Listed on the following pages are the NNEMS Program Coordinators at more than 200 colleges, universities, and distance-learning organizations throughout the U.S. Program Coordinators act as representatives of the NNEMS program by promoting the program on campus, displaying and making available to students NNEMS materials, and assisting students in the preparation of their applications.

The Program Coordinators are sorted in alphabetical order by name of organization.

The points of contact are current, according to information available at the time of publication.

Please note: Any eligible student enrolled for academic credit at an accredited 2- or 4-year college, university, or distance-learning institution may apply for a NNEMS fellowship, regardless of whether or not there is a NNEMS Program Coordinator at their university.



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Appendix C – IRS Publication 520: Scholarships and Fellowships

Department of the Treasury

Internal Revenue Service

Publication 520
(Rev. June 2002)
Cat. No. 15024E

Scholarships and Fellowships

Contents

Important Reminders

Estimated tax. You may have to pay estimated tax if the grantor of a scholarship or fellowship does not withhold tax or withholds insufficient tax on the taxable part of your scholarship or fellowship grant. For more information, see *Estimated Tax,* later.

Individual retirement arrangements (IRAs). You can set up and make contributions to an IRA if you received taxable compensation. Under this rule, a taxable scholarship or fellowship is compensation only if it is shown in box 1 of Form W-2, *Wage and Tax Statement.* For more information about IRAs, see Publication 590, *Individual Retirement Arrangements (IRAs).*

Photographs of missing children. The Internal Revenue Service is a proud partner with the National Center for Missing and Exploited Children. Photographs of missing children selected by the Center may appear in this publication on pages that would otherwise be blank. You can help bring these children home by looking at the photographs and calling **1–800–THE–LOST (1–800–843–5678)** if you recognize a child.

Introduction

This publication covers the rules for scholarships, fellowships, and tuition reductions. These amounts are tax free if they meet the rules discussed in this publication.

This publication also discusses the estimated tax rules and some of the special rules that apply to U.S. citizens and resident aliens who are studying, teaching, or researching abroad under scholarships and fellowships.

This publication does ***not*** discuss certain items that are covered in other publications. These include:

- Hope and lifetime learning credits, Coverdell education savings accounts, qualified tuition programs, and other tax benefits for education. See Publication 970, *Tax Benefits for Education*.
- Student loans that were canceled or forgiven. See Publication 525, *Taxable and Nontaxable Income*.
- Scholarships and fellowships paid to nonresident aliens. See Publication 519, *U.S. Tax Guide for Aliens*.

Comments and suggestions. We welcome your comments about this publication and your suggestions for future editions.

You can e-mail us while visiting our web site at **www.irs.gov**.

You can write to us at the following address:

Internal Revenue Service
Technical Publications Branch
W:CAR:MP:FP:P
1111 Constitution Ave. NW
Washington, DC 20224

We respond to many letters by telephone. Therefore, it would be helpful if you would include your daytime phone number, including the area code, in your correspondence.

Useful Items

You may want to see:

Publication

- ❑ **54** Tax Guide for U.S. Citizens and Resident Aliens Abroad
- ❑ **501** Exemptions, Standard Deduction, and Filing Information
- ❑ **505** Tax Withholding and Estimated Tax
- ❑ **508** Tax Benefits for Work-Related Education
- ❑ **514** Foreign Tax Credit for Individuals
- ❑ **525** Taxable and Nontaxable Income
- ❑ **901** U.S. Tax Treaties
- ❑ **970** Tax Benefits for Education

Form (and Instructions)

- ❑ **1040** U.S. Individual Income Tax Return
- ❑ **1040A** U.S. Individual Income Tax Return
- ❑ **1040EZ** Income Tax Return for Single and Joint Filers With No Dependents
- ❑ **1040ES** Estimated Tax for Individuals

See *How To Get Tax Help* near the end of this publication for information about getting these publications and forms.

Scholarships and Fellowships

This part explains whether your scholarship or fellowship is tax free.

A ***scholarship*** is generally an amount paid for the benefit of a student at an educational institution to aid in the pursuit of studies. The student may be either an undergraduate or graduate.

A ***fellowship*** is generally an amount paid for the benefit of an individual to aid in the pursuit of study or research.

Table 1 provides an overview of the tax treatment of scholarship and fellowship payments received by an individual who is, or is not, a degree candidate.

Tax-Free Scholarships and Fellowships

A scholarship or fellowship is tax free only if:

1) You are a ***candidate for a degree*** at an ***educational institution***, and
2) The grant is a ***qualified scholarship or fellowship***.

Candidate for a degree. The term "candidate for a degree" means a student (full or part-time) who:

1) Attends a primary or secondary school or is pursuing a degree at a college or university, or
2) Attends an accredited educational institution that is authorized to provide:
   a) A program that is acceptable for full credit toward a bachelor's or higher degree, or
   b) A program of training to prepare students for gainful employment in a recognized occupation.

Educational institution. An educational institution maintains a regular faculty and curriculum and has a regularly enrolled body of students in attendance at the place where it carries on its educational activities.

Qualified scholarship or fellowship. A qualified scholarship or fellowship is any amount you receive as a scholarship or fellowship grant that is used under the terms of the grant for:

- Tuition and fees required to enroll in, or to attend, an educational institution, or
- Fees, books, supplies, and equipment that are required for the courses at the educational institution. These items must be required of ***all*** students in your course of instruction.

Your scholarship or fellowship grant can still qualify as tax free even if the terms do not provide that it be used only for tuition and course-related expenses. It will qualify if you use the grant proceeds for tuition and course-related expenses. However, if the terms of the grant require its use for other purposes, such as room and board, or specify that the grant cannot be used for tuition or course-related expenses, the amounts received under the grant are not tax free.

You can use Worksheet A to figure the tax-free and taxable parts of your scholarship or fellowship.

Athletic scholarships. Athletic scholarships are tax free if they meet the requirements discussed above.

Fulbright grants. A Fulbright grant is generally treated as any other scholarship or fellowship in figuring how much of the grant is tax free. If you receive a Fulbright grant for lecturing or teaching, it is payment for services and is taxable. A special rule applies if the grant was paid in nonconvertible foreign currency. See *Payment of Tax by Fulbright Grantees* under *Individuals Abroad,* later.

A Fulbright grant is a grant under the Mutual Educational and Cultural Exchange Act of 1961,

Table 1. **Tax Treatment of Scholarship and Fellowship Payments**

Payment for	Degree candidate	Not a degree candidate
Tuition	Tax free	Taxable
Fees	Tax free[1]	Taxable
Books	Tax free[1]	Taxable
Supplies	Tax free[1]	Taxable
Equipment	Tax free[1]	Taxable
Room	Taxable	Taxable
Board	Taxable	Taxable
Travel	Taxable	Taxable
Teaching	Taxable[2]	Taxable
Research services	Taxable[2]	Taxable
Other services	Taxable[2]	Taxable

[1] If required of all students in the course
[2] Does not include amounts received under the National Health Service Corps Scholarship Program or the Armed Forces Health Professions Scholarship and Financial Assistance Program.

Worksheet A. **Scholarship and Fellowship Income Worksheet**

1. Enter your scholarship or fellowship income	1. _____
• If you are a degree candidate, go to line 2. • If you are **not** a degree candidate, **stop here**. The entire amount is taxable. See *Reporting Scholarships and Fellowships* for how to report this amount on your tax return.	
2. Enter the amount from line 1 that was for teaching, research, or any other services (Do not include amounts received for these items under the National Health Services Corps Scholarship Program or the Armed Forces Health Professions Scholarship and Financial Assistance Program.)	2. _____
3. Subtract line 2 from line 1	3. _____
4. Enter the amount from line 1 (except any amount entered on line 2) used for tuition and course-related fees, books, supplies, and equipment required for study at an educational institution	4. _____
5. Subtract line 4 from line 3	5. _____
6. **Taxable part.** Add line 2 and line 5. See *Reporting Scholarships and Fellowships* for how to report this amount on your tax return	6. _____

known as the Fulbright-Hays Act. If you receive a supplemental grant under the U.S. Information and Educational Exchange Act of 1948 (Smith-Mundt Act) for study, research, or teaching abroad, it is treated like a Fulbright grant.

Pell Grants and other Title IV need-based education grants. These grants are tax free if they are used for qualifying tuition and course-related expenses during the grant period.

Veterans' benefits. Payments you receive for education, training, or subsistence under any law administered by the Department of Veterans Affairs (VA) are tax free.

Qualified education expenses reduced. Education credits, certain deductions, and exclusions from income are based on your qualified education expenses. You must reduce your qualified education expenses by your tax-free qualified scholarship or fellowship grant, tax-free veterans' education benefits, and any other tax-free education benefits. Use your reduced qualified expenses to determine any of the following amounts that apply to you.

- Hope credit.
- Lifetime learning credit.
- Interest deduction on student loans.
- Withdrawals from IRAs that are not subject to 10% additional tax.
- Exclusion from income of interest earned on U.S. Savings Bonds that have been cashed in.
- Deduction as an adjustment to income for qualified tuition and related expenses.
- Deduction for work-related education expenses.

For more information on work-related education expenses, see Publication 508. For more information on all other topics in the above list, see Publication 970.

Taxable Scholarships and Fellowships

If your scholarship or fellowship does not meet the rules described earlier, it is taxable. The following are examples of amounts that are taxable.

Incidental expenses. An amount you receive for incidental expenses is not a tax-free qualified scholarship. Incidental expenses are expenses for items that are not required for either enrollment or attendance at an educational institution, or in a course of instruction at the educational institution. Incidental expenses include:

- Room and board,
- Travel,
- Research,
- Clerical help, and
- Equipment.

Example. You receive a scholarship from State University to enroll in a writing course. Suggested supplies for the writing course include a computer. Amounts used for suggested supplies are not qualified scholarship expenses. You cannot include the cost of a computer to determine the amount received as a qualified scholarship.

Payment for services. Generally, you must include in income the part of any scholarship, fellowship, or tuition reduction that represents payment for past, present, or future teaching, research, or other services. This applies even if all candidates for a degree must perform the services to receive the degree.

Example 1. You received a scholarship of $2,500. As a condition for receiving the scholarship, you must serve as a part-time teaching assistant. Of the $2,500 scholarship, $1,000 represents payment for teaching. The grantor gives you a Form W–2 showing $1,000 as income. You used all the money for tuition and course-related expenses. Assuming that all other conditions are met, $1,500 of your grant is tax-free. The $1,000 you received for teaching is taxable.

Example 2. You are a candidate for a degree at a medical school. You receive a government grant for your medical education and training. The terms of the grant require you to perform a period of obligated service in a designated medically underserved area of the country following completion of your medical studies. A substantial penalty applies if you do not comply. The entire amount of your grant is taxable as payment for services in the year it is received unless it is received under a program for which an exception, discussed next, applies.

Exceptions. You do not have to include in income the part of any scholarship, fellowship, or tuition reduction representing payment for teaching, research, or other services if you receive the amount under the National Health Service Corps Scholarship Program or the Armed Forces Health Professions Scholarship and Financial Assistance Program.

Payment to service academy cadets. An appointment to a United States military academy is not a scholarship or fellowship. Payment you receive as a cadet or midshipman at an armed services academy is pay for personal services. Include this pay in your income in the year you receive it unless an exception, discussed above, applies.

Scholarship prizes. Cash scholarship prizes won in a contest are not scholarships if you do not have to use the prizes for educational purposes. These prizes are taxable regardless of how you use the money. A scholarship prize that you can use only when enrolled as a candidate for a degree at a college is a qualified scholarship.

Additional Information

If there is some doubt about the tax treatment of your grant, consult the grantor. The grantor may have received advice from the IRS about the appropriate tax treatment of the grant. You can also contact the IRS Director for your area. Be sure to ask for the information as soon as possible so that you can receive an answer in time to file your return. If you request this advice by mail, give a complete statement of all the facts.

Reporting Scholarships and Fellowships

If your only income is a completely tax-free scholarship or fellowship, you do not have to file a tax return and no reporting is necessary. If all or part of your scholarship or fellowship is taxable and you are required to file a tax return, report the taxable amount as explained next. You must report the taxable amount whether or not you received a Form W–2. If you receive an incorrect Form W–2, ask the payer for a corrected one.

For information on filing requirements, see Publication 501 or your income tax form instructions.

Form 1040EZ. Report the taxable amount on line 1. If the taxable amount was not reported on Form W–2, print "SCH" and the amount to the right of the words "W–2 form(s)" on line 1.

Form 1040 or 1040A. Report the taxable amount on line 7. If the taxable amount was not reported on Form W–2, print "SCH" and the amount on the dotted line next to line 7 on Form 1040 or in the space to the left of line 7 on Form 1040A.

Schedule SE (Form 1040). Amounts you receive under a grant that represent pay for your services as an independent contractor are included in determining net earnings from self-employment. If your net earnings are $400 or more, you will have to pay self-employment tax. Use Schedule SE, *Self-Employment Tax*, to figure this tax.

Whether you are an independent contractor or employee depends on the facts in your situation. The general rule is that you are an independent contractor if the payer has the right to control or direct only the result of the work and not what will be done and how it will be done.

You are not an independent contractor if you perform services that can be controlled by an employer (what will be done and how it will be done). This applies even if you are given freedom of action. What matters is that the employer has the legal right to control the details of how the services are performed. If an employer-employee relationship exists (no matter what the relationship is called), you are not an independent contractor.

For more information in determining whether you are an independent contractor or an employee, get Publication 15-A, *Employer's Supplemental Tax Guide*.

When To File

If you file on the calendar year basis, the due date for filing your return is April 15 of the following year. If you file on a fiscal year basis (a year ending on the last day of any month except December), the due date is the 15th day of the 4th month after the close of your fiscal year.

When the due date for ***any*** act for tax purposes falls on a Saturday, Sunday, or legal holiday, the due date is delayed until the next business day.

Your paper return is filed on time if it is mailed in an envelope that is properly addressed and postmarked by the due date. You can use a designated private delivery service to send your return. See your form instructions for a list of private delivery services.

If you use IRS *e–file*, your return is considered filed on time if the authorized electronic return transmitter postmarks the transmission by the due date.

Extensions. You can get an extension of time to file your return. Special rules apply if you were:

- Outside the United States (see Publication 54), or
- Serving in a combat zone (see Publication 3, *Armed Forces' Tax Guide*).

Automatic extension. If you are not able to file your return by the due date, you generally can get an automatic 4-month extension of time to file. To get this automatic extension, use Form 4868, *Application for Automatic Extension of Time to File U.S. Individual Income Tax Return*. Generally, you must request the 4-month extension by the regular due date of your return. See the Form 4868 instructions for how to file.

Where To File

If you are living in the United States, send your return to the appropriate Internal Revenue Service Center address listed in the instructions to your federal tax return.

If you are studying or teaching abroad, send your return to the Internal Revenue Service Center, Philadelphia, PA 19255-0215 U.S.A.

Qualified Tuition Reduction

A qualified tuition reduction is tax free. It is a reduction in tuition that meets the following rules. Separate rules apply to education below the graduate level and education at the graduate level.

Education below the graduate level. A tuition reduction for education below the graduate level is tax free if the reduction is provided by an educational institution to its employees for their education or the education of any person treated as an employee. It must not represent a payment for services. Under this rule, only the following are treated as employees.

1) A current employee,
2) A former employee who retired or left on disability,
3) A widow or widower of an individual who died while an employee,
4) A widow or widower of a former employee who retired or left on disability, or
5) A dependent child or spouse of any person listed in (1) through (4), above.

Child of deceased or divorced parents. If both parents have died, and if one of the parents qualified as an employee under (1) through (4) above, their child, if under age 25, can qualify to exclude a tuition reduction from income.

A dependent child of divorced parents is treated as the dependent of both parents.

Officers, owners, and highly compensated employees. Qualified tuition reductions apply to officers, owners, or highly compensated employees if benefits are available to employees on a nondiscriminatory basis. This means that the tuition reduction benefits must be available on substantially the same basis to each member of a group of employees, defined under a reasonable classification set up by the employer. It must not discriminate in favor of owners, officers, or highly compensated employees.

Graduate education. A tuition reduction for graduate education is tax free if the reduction is provided by an educational institution to a graduate student who performs teaching or research activities for that institution. The qualified tuition reduction must be for education furnished by that institution, and not represent payment for services.

Individuals Abroad

For the most part, U.S. scholars and teachers abroad are taxed like those living in the United States. You determine the tax treatment of a scholarship or fellowship under the rules discussed earlier. A payment for services, such as teaching or lecturing, is taxable. This includes cash paid to you for transportation expenses and the value of transportation provided by the grantor.

If your scholarship or fellowship is taxable, special rules apply to:

- Reporting income,
- Deducting expenses,
- Paying foreign taxes, and
- Paying U.S. income tax.

Reporting Income

You must report all income on a U.S. federal income tax return in U.S. dollars. If part or all of your income is in foreign currency, you must report this income in U.S. dollars at the rates of exchange in effect when you received the income. You should use the rate that most nearly reflects the value of the foreign currency—the official rate, the open market rate, or any other appropriate rate. You must be able to justify the rate you use.

A special rule applies if the income is paid in nonconvertible foreign currency. See Blocked Income, *later.*

Foreign Earned Income Exclusion

You may be able to exclude foreign earned income from your gross income if your tax home is in a foreign country and you are:

- A U.S. citizen and a bona fide resident of a foreign country or countries for an uninterrupted period that includes an entire tax year,
- A U.S. resident alien who is a citizen or national of a country with which the United States has an income tax treaty in effect and who is a bona fide resident of a foreign country or countries for an uninterrupted period that includes an entire tax year, or
- A U.S. citizen or a U.S. resident alien and are physically present in a foreign country or countries for at least 330 full days in 12 consecutive months.

In addition, you may qualify to exclude or deduct a foreign housing amount.

Tax home. Your tax home is the general area of your main place of business, employment, or post of duty, regardless of where you maintain your family home. Your tax home is the place where you permanently or indefinitely work. You

are not considered to have a tax home in a foreign country for any period in which your abode is in the United States. Your abode can be your home, habitation, residence, domicile, or place of dwelling. If your tax home remains in the United States while you are abroad, you will not qualify for the foreign earned income or housing exclusions or the foreign housing deduction. But you may be able to deduct your away-from-home expenses (for travel, meals, and lodging). See *Deducting Expenses,* later.

More information. For more information on tax home, the foreign earned income exclusion, and the foreign housing exclusion and deduction, see Publication 54.

Blocked Income

There may be cases in which a scholarship or fellowship grant is made in a foreign currency that is not convertible into U.S. dollars or into other money or property that is convertible into U.S. dollars because of:

- Restrictions imposed by the foreign country,
- An agreement with the United States, or
- The terms and conditions of the U.S. Government grant.

This nonconvertible income is commonly called blocked or deferrable income.

How to report. There are two ways to report blocked income:

1) Report the income and pay your federal income tax with U.S. dollars that you have in the United States or in some other country, or
2) Defer reporting the income until it becomes unblocked. Any expenses related to the income must also be deferred.

Defer reporting. If you choose to defer reporting the income, you must file with your federal income tax return an information return on a separate Form 1040 labeled "Report of Deferrable Foreign Income, pursuant to Rev. Rul. 74–351." You must declare on the information return that you will include the blocked income in your gross income when it becomes unblocked. You also must state that you give up any right to claim that any part of the blocked income was includable in income for any earlier year.

All amounts reported on the information return must be reported in the foreign currency involved. If you have blocked income from more than one foreign country, include a separate information return for each country.

Your choice to defer reporting income cannot be changed without the consent of the IRS. Use Form 3115, *Application for Change in Accounting Method,* to request a change.

Income becomes unblocked and reportable for tax purposes when any of the following happen.

1) It becomes convertible.
2) It is converted into dollars or into other money or property that is convertible into U.S. dollars.
3) You use blocked income for your nondeductible personal expenses.
4) You dispose of it by gift, bequest, or devise.

Deducting Expenses

If your grant for lecturing or teaching abroad is wholly taxable, you can deduct your ordinary and necessary business expenses. Ordinary and necessary business expenses include your away-from-home expenses (travel, meals, and lodging) if you are temporarily away from your tax home in the United States. Your expenses do not include the expenses of anyone accompanying you. Generally, you are considered to be temporarily away from your U.S. tax home if you expect your stay abroad to last, and it does last, for one year or less. For details about these expenses, including whether your stay is temporary, see Publication 463, *Travel, Entertainment, Gift, and Car Expenses.*

Paying Foreign Taxes

The United States has income tax treaties with certain countries. Under these treaties, the citizens and residents of the United States are exempt from foreign income taxes on certain amounts received while they are temporarily in a treaty country. The kinds of income that may be exempt by treaties include:

- Certain pay for personal services performed by a U.S. citizen or resident temporarily present in a treaty country,
- Wages of U.S. professors, teachers, and researchers who teach or do research in a treaty country, and
- Certain remittances, grants, allowances, and awards received by U.S. students, apprentices, and trainees who are studying in a treaty country.

For more information on these tax treaty provisions, get Publication 901. Although Publication 901 is written for foreign nationals receiving income from U.S. sources, treaty provisions are generally reciprocal, applying equally to U.S. citizens or residents deriving income from foreign sources.

Paying U.S. Income Tax

You must pay any income tax due with U.S. dollars. This rule may not apply to the tax on a Fulbright grant that was paid in nonconvertible foreign currency, as explained later.

Credit or deduction for foreign taxes paid. If income taxes are imposed on you by a foreign country, you may be entitled to take either a tax credit or a tax deduction on your U.S. income tax return. Usually, it is to your advantage to claim the credit, which you subtract directly from your U.S. tax liability. Get Publication 514.

Payment of Tax by Fulbright Grantees

As explained earlier, all income must be reported in U.S. dollars. In most cases, the tax must also be paid in U.S. dollars. If, however, at least 70% of your entire Fulbright grant has been paid in nonconvertible foreign currency (blocked income), you can use that currency to pay the U.S. tax, but only the part that is on the blocked income.

Paying U.S. tax in foreign currency. To qualify for this method of payment, you must prepare a statement that shows the following information.

- You were a Fulbright grantee and were paid in nonconvertible foreign currency.
- The total grant you received during the year and the amount you received in nonconvertible foreign currency.
- At least 70% of the grant was paid in nonconvertible foreign currency.

The statement must be certified by the U.S. educational foundation or commission paying the grant or other person having control of grant payments to you.

You should prepare at least two copies of this statement. Attach one copy to your Form 1040 and keep the other copy for identification purposes when you make a tax deposit of nonconvertible foreign currency.

Figuring actual tax. When you prepare your income tax return, you may owe tax or the entire liability may have been satisfied with your estimated tax payments. If you owe tax, figure the part due to (and payable in) the nonconvertible foreign currency by using the formula in Table 2.

1) Substitute actual amounts for estimated amounts.
2) Subtract estimated tax payments from the part of your actual tax payable in nonconvertible foreign currency.

You must attach all of the following to the return.

Table 2. **Formula to Determine Estimated Tax That May Be Paid in a Nonconvertible Foreign Currency**

$$\frac{\text{Adjusted gross income that is blocked income}^*}{\text{Total adjusted gross income}^*} \times \text{Total estimated U.S. tax} = \text{Estimated tax on blocked income}$$

* Estimated amounts

- A copy of the certified statement discussed earlier.
- A detailed statement showing the allocation of tax attributable to amounts received in foreign currency and the rates of exchange used in determining your tax liability in U.S. dollars.
- The original deposit receipt for any balance of tax due that you paid in nonconvertible foreign currency.

1) A copy of the certified statement discussed earlier.
2) A detailed statement showing the allocation of tax attributable to amounts received in foreign currency and the rates of exchange used in determining your tax liability in U.S. dollars.
3) The original deposit receipt for any balance of tax due that you paid in nonconvertible foreign currency.

Figuring estimated tax on nonconvertible foreign currency. If you are liable for estimated tax (discussed later), figure the amount you can pay to IRS in nonconvertible foreign currency using the formula in Table 2.

If you must pay your host country income tax on your grant, subtract any estimated foreign tax credit that applies to your grant from the estimated tax on the blocked income.

Deposit of foreign currency with disbursing officer. Once you have determined the amount of the actual tax or estimated tax that you can pay in nonconvertible foreign currency, deposit that amount with the disbursing officer of the Department of State in the foreign country in which the foundation or commission paying the grant is located.

Estimated tax installments. You may either deposit the full estimated tax amount before the first installment due date or make four equal payments before the installment due dates. See *When to pay estimated tax,* later.

Deposit receipt. Upon accepting the foreign currency, the disbursing officer will give you a receipt in duplicate. The original of this receipt (showing the amount of foreign currency deposited and its equivalent in U.S. dollars) should be attached to your Form 1040 or payment voucher from Form 1040–ES. Keep the copy for your records. Mail the return or your payment voucher to the Internal Revenue Service Center, Philadelphia, PA 19255–0215, U.S.A.

Estimated Tax

The grantor of a scholarship or fellowship does not withhold tax unless the grant represents payment for services. Grants representing payment for services are wages for withholding purposes. The grantor must report them on a Form W–2.

You may have to pay estimated tax if the grantor of a scholarship or fellowship does not withhold tax or withholds insufficient tax on the taxable part of your scholarship or fellowship grant.

Your estimated tax is the total of your expected tax for the year minus your expected withholding and credits.

Use Form 1040–ES to figure and pay estimated tax. See Publication 505 for information on estimated tax.

Who should make estimated tax payments? Generally, you must make estimated tax payments if you expect to owe at least $1,000 in tax after subtracting your withholding and credits, and you expect your withholding and credits to be less than the smaller of:

1) 90% of the total tax for the year, or
2) 100% of the total tax shown on your preceding year's tax return. You must have filed a return for the preceding tax year that covers all 12 months.

When to pay estimated tax. For estimated tax purposes, the year is divided into four payment periods. The payment due dates are April 15, June 15, September 15, and January 15. If you have income subject to estimated tax during the first payment period, you must make your first payment by the due date for the first payment period. You can pay all your estimated tax at that time, or you can pay it in four installments. If any of the due dates fall on a Saturday, Sunday, or legal holiday, the due date is the following business day.

Penalty. If you do not pay enough of your estimated tax in each payment period, you may have to pay a penalty. You will not have to pay a penalty if you had no tax liability last year and you were a U.S. citizen or resident for the whole year. For this rule to apply, your prior tax year must have been a tax year of 12 months.

How To Get Tax Help

You can get help with unresolved tax issues, order free publications and forms, ask tax questions, and get more information from the IRS in several ways. By selecting the method that is best for you, you will have quick and easy access to tax help.

Contacting your Taxpayer Advocate. If you have attempted to deal with an IRS problem unsuccessfully, you should contact your Taxpayer Advocate.

The Taxpayer Advocate represents your interests and concerns within the IRS by protecting your rights and resolving problems that have not been fixed through normal channels. While Taxpayer Advocates cannot change the tax law or make a technical tax decision, they can clear up problems that resulted from previous contacts and ensure that your case is given a complete and impartial review.

To contact your Taxpayer Advocate:

- Call the Taxpayer Advocate at **1–877–777–4778.**
- Call the IRS at **1–800–829–1040.**
- Call, write, or fax the Taxpayer Advocate office in your area.
- Call **1–800–829–4059** if you are a TTY/TDD user.

For more information, see Publication 1546, *The Taxpayer Advocate Service of the IRS.*

Free tax services. To find out what services are available, get Publication 910, *Guide to Free Tax Services.* It contains a list of free tax publications and an index of tax topics. It also describes other free tax information services, including tax education and assistance programs and a list of TeleTax topics.

Personal computer. With your personal computer and modem, you can access the IRS on the Internet at **www.irs.gov**. While visiting our web site, you can:

- Find answers to questions you may have.
- Download forms and publications or search for forms and publications by topic or keyword.
- View forms that may be filled in electronically, print the completed form, and then save the form for recordkeeping.
- View Internal Revenue Bulletins published in the last few years.
- Search regulations and the Internal Revenue Code.
- Receive our electronic newsletters on hot tax issues and news.
- Get information on starting and operating a small business.

You can also reach us with your computer using File Transfer Protocol at **ftp.irs.gov**.

TaxFax Service. Using the phone attached to your fax machine, you can receive forms and instructions by calling **703–368–9694.** Follow the directions from the prompts. When you order forms, enter the catalog number for the form you need. The items you request will be faxed to you.

For help with transmission problems, call the FedWorld Help Desk at **703–487–4608.**

Phone. Many services are available by phone.

- *Ordering forms, instructions, and publications.* Call **1–800–829–3676** to order current and prior year forms, instructions, and publications.
- *Asking tax questions.* Call the IRS with your tax questions at **1–800–829–1040.**
- *TTY/TDD equipment.* If you have access to TTY/TDD equipment, call **1–800–829–4059** to ask tax questions or to order forms and publications.
- *TeleTax topics.* Call **1–800–829–4477** to listen to pre-recorded messages covering various tax topics.

Evaluating the quality of our telephone services. To ensure that IRS representatives give accurate, courteous, and professional answers, we evaluate the quality of our telephone services in several ways.

- A second IRS representative sometimes monitors live telephone calls. That person

only evaluates the IRS assistor and does not keep a record of any taxpayer's name or tax identification number.

- We sometimes record telephone calls to evaluate IRS assistors objectively. We hold these recordings no longer than one week and use them only to measure the quality of assistance.
- We value our customers' opinions. Throughout this year, we will be surveying our customers for their opinions on our service.

Walk-in. You can walk in to many post offices, libraries, and IRS offices to pick up certain forms, instructions, and publications. Some IRS offices, libraries, grocery stores, copy centers, city and county governments, credit unions, and office supply stores have an extensive collection of products available to print from a CD-ROM or photocopy from reproducible proofs. Also, some IRS offices and libraries have the Internal Revenue Code, regulations, Internal Revenue Bulletins, and Cumulative Bulletins available for research purposes.

Mail. You can send your order for forms, instructions, and publications to the Distribution Center nearest to you and receive a response within 10 workdays after your request is received. Find the address that applies to your part of the country.

- **Western part of U.S.:**
  Western Area Distribution Center
  Rancho Cordova, CA 95743–0001
- **Central part of U.S.:**
  Central Area Distribution Center
  P.O. Box 8903
  Bloomington, IL 61702–8903
- **Eastern part of U.S. and foreign addresses:**
  Eastern Area Distribution Center
  P.O. Box 85074
  Richmond, VA 23261–5074

CD-ROM. You can order IRS Publication 1796, *Federal Tax Products on CD-ROM,* and obtain:

- Current tax forms, instructions, and publications.
- Prior-year tax forms and instructions.
- Popular tax forms that may be filled in electronically, printed out for submission, and saved for recordkeeping.
- Internal Revenue Bulletins.

The CD-ROM can be purchased from National Technical Information Service (NTIS) by calling **1–877–233–6767** or on the Internet at **www.irs.gov.** The first release is available in mid-December and the final release is available in late January.

IRS Publication 3207, *Small Business Resource Guide,* is an interactive CD-ROM that contains information important to small businesses. It is available in mid-February. You can get a free copy by calling **1–800–829–3676** or visiting the IRS web site at **www.irs.gov.**

Services Available Outside the United States

During the filing period (January to mid-June), you can get the necessary federal tax forms and publications from U.S. Embassies and consulates. You can request Package 1040–7 for Overseas Filers, which contains special forms with instructions and Publication 54.

Also during the filing season, the IRS conducts an overseas taxpayer assistance program. To find out if IRS personnel will be in your area, you should contact the consular office at the nearest U.S. Embassy.

Phone. You can also call your nearest U.S. Embassy, consulate, or IRS office listed below to find out when and where assistance will be available. These IRS telephone numbers include the country and city codes required if you are outside the local dialing area.

Berlin, Germany	(49)	(30)	8305–1140
London, England	(44)	(207)	408–8077
Mexico City, Mexico	(52)	(55)	5080–2191
Paris, France	(33)	(1)	4312–2555
Rome, Italy	(39)	(06)	4674–2560
Singapore	(65)		6476–9413
Tokyo, Japan	(81)	(3)	3224–5466

Overseas taxpayers can also call the U.S. for help at **(215) 516–2000**.

If you are in Guam, the Bahamas, U.S. Virgin Islands, or Puerto Rico, you can call **(787) 759–5100** or **1–800–829–1040**.

Mail. For answers to technical or account questions, you can write to:

Internal Revenue Service
International Section
P.O. Box 920
Bensalem, PA 19020–8518.

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